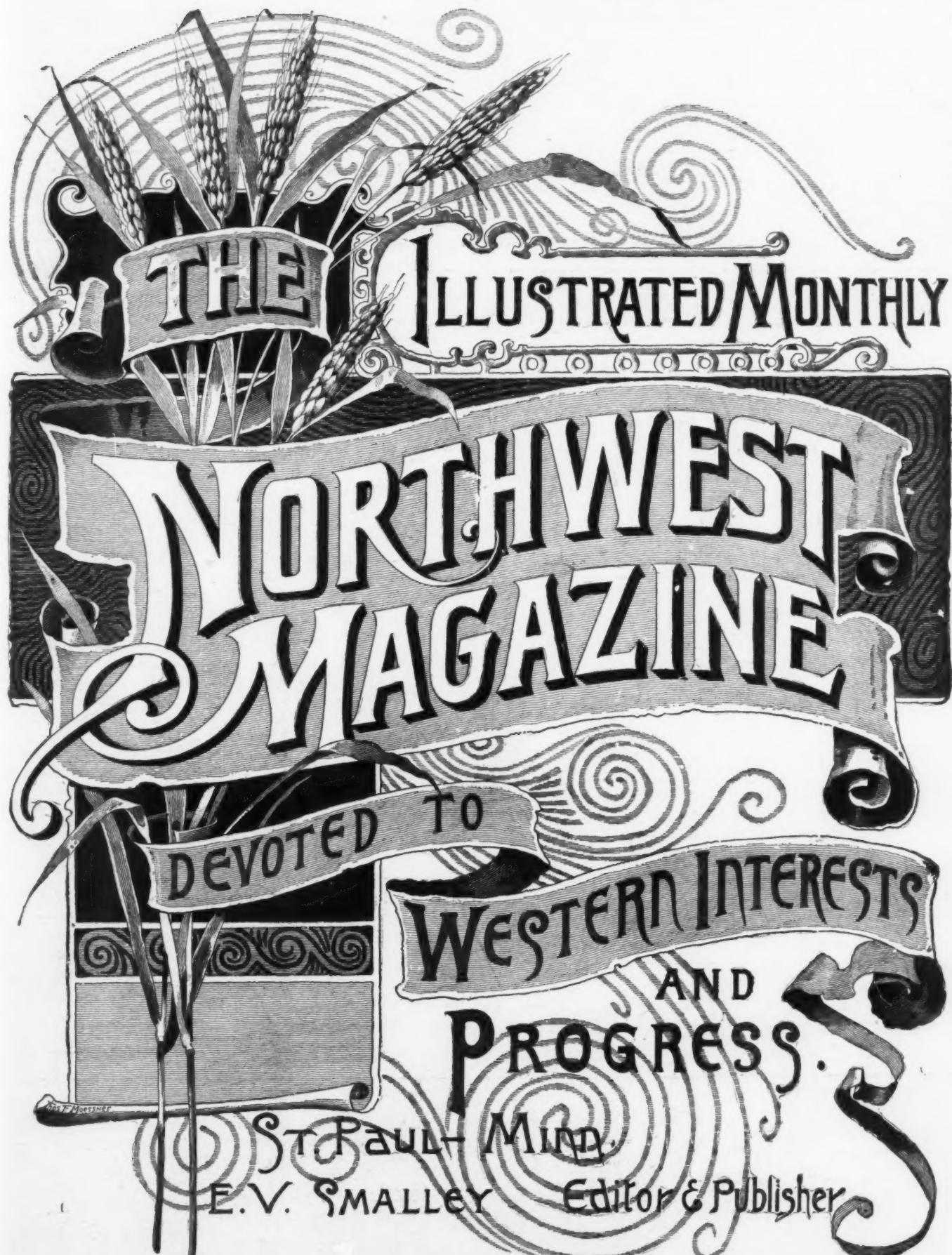


In this issue: { "Sacajaweah."
"Gallatin Valley, Montana."
"Prune Growing on the Columbia."

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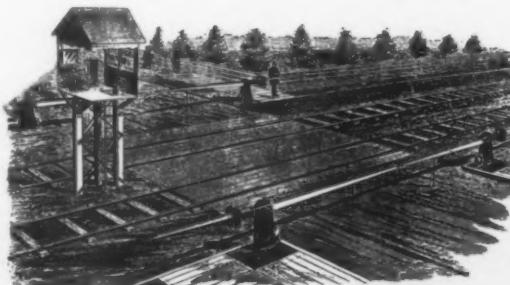
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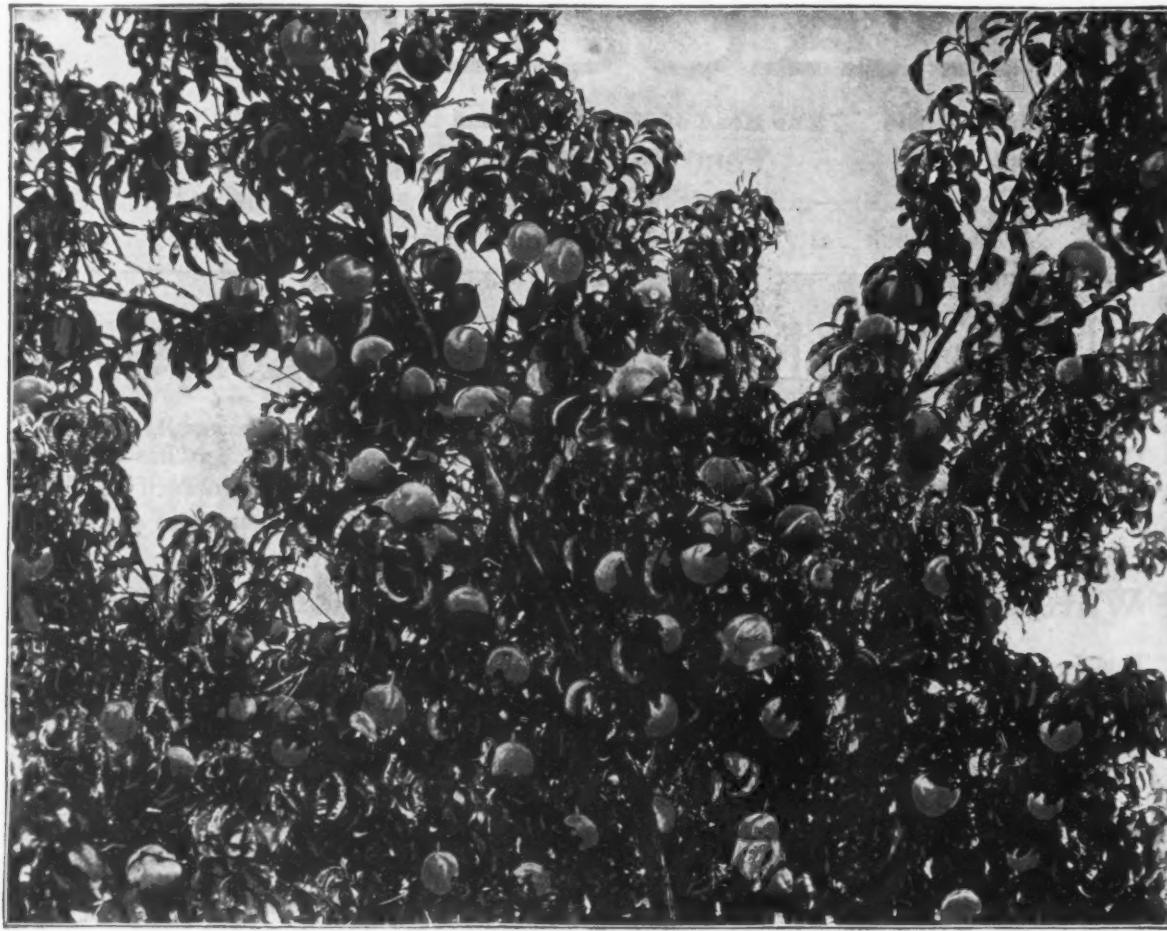
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My raspberries ripened in May and the cherries the last of May. We had ripe peaches on the trees the twelfth of July, 1893, also apricots, and we shall see the last of the peaches in September. Received \$53 for the melons from about one-half acre last year—and this in my orchard. The early melons sold for forty cents apiece because I picked them over two weeks before they ripened, at North Yakima or Ellensburg. I picked the first ripe melon of the season to-day, July 27th. My alfalfa in 1892 cut about eight tons per acre, and sold at \$12.50 per ton in the stack. We can cut five crops per year, while up in the Yakima Valley, about 100 miles nearer the Cascade Mountains—near North Yakima—they only cut four crops. This year the yield is heavier than last, and I am getting more than two tons per acre per cutting. Vegetables of all kinds grow in abundance. I raised a watermelon weighing fifty-five pounds. Am having good success in raising hogs on alfalfa and am not feeding them any grain. Can pasture here from March to the last of December. Shall be pleased to correspond with anyone wishing to settle in Washington."

To appreciate the value of these lands one ought to examine them, for it will seem strange to one not posted that thousands of acres may be bought at \$25 to \$50 per acre in the same county, with just the same kind of land and soil as those farms selling at \$200 to \$800 per acre. The following lands that I offer for sale are such lands

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6. Extra peach land about eight miles from railroad station on the river; the railroad may be reached by water. Any part of 320 acres at \$25 per acre. Five years' time; one-fifth cash.

THE NORTHWEST

Illustrated Monthly Magazine

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SACAJAWEAH.

BY WM. F. WHEELER.

[The following account of the services rendered to Captains Lewis and Clarke during their travels up the Missouri River and across the Rocky Mountains to the Pacific Ocean, by Sacajawea, a Shoshone Indian woman, the wife of Toussaint Chaboneau, a Canadian Frenchman who was employed by Lewis and Clarke as a hunter and interpreter of the Indian languages of the several tribes living along the Missouri River, was compiled mostly from their journal of the expedition, and enough of the narrative of the journey was retained and is given in as brief a form as possible, to show the route followed by them in going and returning. The portion of the journey in which Sacajawea accompanied the expedition as guide and interpreter, and the services she rendered as such, are described much more fully. The writer traveled over three-fourths of the identical route followed by Lewis and Clarke, and can therefore certify intelligently as to the clearness and fidelity of their descriptions. The expedition left its winter camp on Monday, May 14th, 1804. The spot was at the mouth of Wood River, a small stream on the east bank of the Mississippi opposite to the entrance of the Missouri. The particulars are given in the journal of the expedition. Captains Lewis and Clarke arrived at the Mandan village on the 27th day of October, 1804.—Ed.]

After the arrival of Captains Lewis and Clarke at the Mandan village the members of the expedition made a temporary camp near the Mandans, and the time was spent by the chief officers in making the acquaintance of the Indians who came from all directions to visit them. These they instructed in the object of their visit to their country, and smoked council pipes and feasted without limit and thus became firm friends. On the 2d and 3d of November Captain Clarke established a winter camp and began to build their cabins. At this time they fortunately employed a Canadian Frenchman named Toussaint Chaboneau, who had been with the Cheyenne Indians in the Black Mountains (now called Black Hills.)

Sunday, Nov. 11, 1804.—We received the visit of two squaws, prisoners from the Rock Mountains, and purchased by Chaboneau.

Sunday, Jan. 13, 1805.—Chaboneau and one man returned this day from Turtle Mountain, with their faces much frost-bitten. They had been there to purchase meat from the Minnetarees. He reported that the chief had told them the Hudson Bay Company intended to build a fort at that place; but this the agents of the company afterwards denied to Captains Lewis and Clarke.

Sunday, Feb. 10.—Chaboneau returned from a buffalo hunt, loaded with meat. He hunted for the party during the winter.

Monday, Feb. 11.—Sacajawea, one of Chaboneau's wives, was delivered of a boy.

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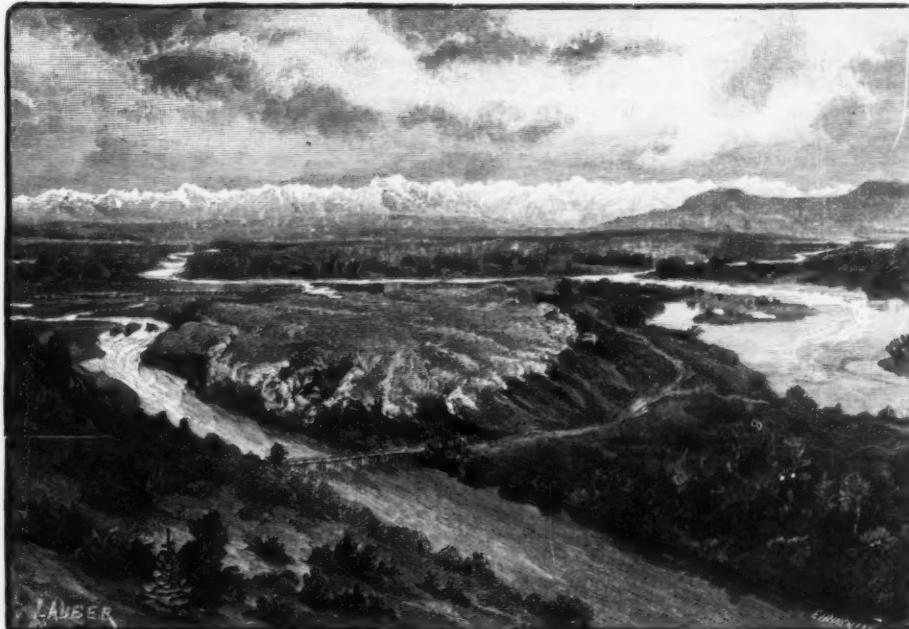
Sunday, April 7.—This day, about 5 P. M., Captains Lewis and Clarke, with their whole party, thirty-two in number, left their winter quarters at the Mandan village, and started on their long journey up the Missouri River.

Their journal gives the following account of Toussaint Chaboneau, the interpreter, and his wife:

"The wife of Chaboneau also accompanied us with her young child, and we hope may be useful as an interpreter among the Snake Indians. She was herself one of that tribe, but having been taken in war by the Minnetarees, a band of the Sioux nation, she was sold as a slave to

ill, but she now found great relief from the mineral water of the sulphur spring. It is situated about 200 yards from the Missouri, into which it empties over a precipice of rock about twenty-five feet high. The water is perfectly transparent, strongly impregnated with sulphur, and we suspect iron also, as the color of the hills and bluffs in the neighborhood indicates the presence of that metal. In short, the water, to all appearance, is precisely similar to that of Bower's sulphur spring in Virginia." Many springs similar to that exist in Montana, and also many boiling and hot springs.

It almost seems there was an especial provi-



THREE FORKS OF THE MISSOURI—CONFLUENCE OF THE JEFFERSON, MADISON AND GALLATIN RIVERS.

Chaboneau, who brought her up and afterwards married her." His other wives staid with their tribe, the Mandans, it is supposed, as they are not mentioned further.

Under date of Sunday, June 16, 1805, the journal makes the following statement concerning the large sulphur spring on the north side of the Missouri River below the Great Falls, and the happy curative effect upon Sachajaweah of its waters:

"Since leaving Marias River, the wife of Chaboneau, our interpreter, has been dangerously

dence taking care of the Lewis and Clarke expedition, and if so, Sacajawea was especially created, and wonderfully preserved on several occasions, as will be shown hereafter, to make that expedition a perfect success. The following gives the first instance. It is taken from the journal under date of June 29th. Capt. Clarke writes that, finding it impossible to reach the end of the portage (from Portage Creek below the Great Falls, on the south side of the Missouri River up to White Bear Island) with the present load, in consequence of the state of the roads after

the rain, he sent back nearly all his party to bring on the articles which had been left yesterday. Having lost some notes and remarks which he had made on ascending the river, he determined to go up to the White Bear Islands along its banks, in order to supply the deficiency. He there left one man to guard the baggage, and went on to the falls, accompanied by his servant, York, Chaboneau and his wife with her young child. On his arrival there he observed a very dark cloud rising in the west, which threatened rain, and looked around for some shelter, but could find no place where they would be secure from being blown into the river, if the wind should prove as violent as it sometimes does on the plains.

At length, about a quarter of a mile above the falls, he found a deep ravine where there were some shelving rocks, under which he took refuge. They were on the upper side of the ravine near the river, perfectly safe from the rain, and therefore laid down their guns, compass and other articles which they carried with them.

The shower was at first moderate, it then increased to a heavy rain, the effects of which they did not feel; soon after a torrent of rain and hail descended: the rain seemed to fall in a solid mass, and instantly collecting in a ravine came rolling down in a dreadful current, carrying the mud and rocks and everything that opposed it. Captain Clarke fortunately saw it a moment before it reached them, and springing up with his gun and shot pouch in his left hand, with his right clambered up the steep bluff, pushing on the Indian woman with the child in her arms; her husband, too, had seized her hand, and was pulling her up the hill, but he was so terrified at the danger that but for Captain Clarke, he and his wife and child would have been lost.

So instantaneous was the rise of the water, that before Captain Clarke had reached his gun and begun to ascend the bank, the water was up to his waist, and he could scarce get up faster than it rose, till it reached the height of fifteen feet, with a furious current, which, had they waited a moment longer, would have swept them into the river just above the Great Falls, down which they must inevitably have been precipitated.

They reached the plain in safety, and found York, who had separated from them just before the storm to hunt some buffalo, and was now returning to find his master. They had been obliged to escape so rapidly that Captain Clarke had lost his compass and umbrella. Chaboneau left his gun, shot pouch and tomahawk, and the Indian woman had just time to grasp her child before the net in which it lay at her feet was carried down the current.

This was a narrow escape for all. I have often seen the place, but never without a shudder at the recollection of the wonderful escape of Captain Clarke and party.

Nearly a month after the above adventure, through much labor and many hardships, the whole expedition reached the head of the Missouri where the Three Forks unite to form it. This occurred on Saturday, the 27th of July. The journal says: "We are very anxious now to see the Snake Indians." Captain Clarke had ascended a high bluff, and could see the three rivers, the Gallatin, Madison and Jefferson, which names they had given them, as if platted on a map for some miles above their juncture. As navigation was getting more and more difficult they were anxious to meet some tribe from which they might procure horses. "Our consolation is," continued the journal, "that this southwest branch (the Jefferson) can scarcely head with any other river than the Columbia, and that if any nation of Indians can live in the mountains, we are able to endure as much as they, and have better means of procuring food.

"July 29.—Sacajaweah, our Indian woman, informs us that we are encamped on the precise spot where her countrymen, the Snake Indians, had their tents five years ago, when the Minnetarees of Knife River first came in sight of them, and from which they hastily retreated three miles up the Jefferson, and concealed themselves in the woods. The Minnetarees, however, pursued and attacked them, killing four men, as many women, and a number of boys, and made prisoners of four other boys, and all the females, of whom Sacajaweah was one. She does not, however, show any distress at these recollections, nor any joy at the prospect of being restored to her country; for she seems to possess the folly, or the philosophy, of not suffering her feelings to extend beyond the anxiety of having plenty to eat and a few trinkets to wear."

This first preservation from death, and her capture by the Minnetarees, who took her more than a thousand miles down the Missouri to the Knife River, was a fortunate, if not a providential circumstance for the expedition of Lewis and Clarke; for she soon introduced them to her tribe, the Snake Indians, and made them the fast friends of the whites, even to the Columbia River.

"August 8, 1805.—Our right is the point of a high plain, which our Indian woman (Sacajaweah) recognizes as the place called the Beaver's-head, from a supposed resemblance to that object. This, she says, is not far from the summer retreat of her countrymen, which is on a river beyond the mountains, and running to the west. She is therefore certain that we will meet them either on this river, or on that immediately west of its source, which, judging from its present size, cannot be far distant. Persuaded of the absolute necessity of procuring horses to cross the mountains, it was determined that one of us should proceed in the morning to the head of the river, and penetrate the mountains till he found the Shoshonees (Snake Indians), or some other nation, who could assist us in transporting our baggage, the greater part of which we shall be compelled to leave without the aid of horses."

Captain Lewis was so well satisfied with the advice of Sacajaweah (who, since the party had reached the head of the Missouri had become the guide of the expedition, for she remembered the country perfectly), that he adopted her advice to ascend the north fork of the Jefferson, called Wisdom River, and seek the Shoshonees on the stream where they lived, beyond the mountains running to the west. So, on August 9, accompanied by three of his men—Drewyer, an interpreter, Shields and McNeal, he set out for the prominent landmark known as Beaver's-head, which they reached on the evening of the 10th.

His first view of a Shoshonee Indian is thus described by Captain Lewis: "Sunday, Aug. 11. Captain Lewis again proceeded on early, but had the mortification to find the track which he followed yesterday soon disappeared. He determined, therefore, to go on to the narrow gate or pass of the river which he had seen from the camp, in hope of being able to recover the Indian path. For this purpose he waded across the river which was now about twelve yards wide, and barred in several places by the dams of the beaver, and then went straight forward to the pass, sending one man along the river to his left and another on to the right, with orders to search for the road, and if they found it to let him know by raising a hat on the muzzle of their guns. In this order they went along for about five miles, when Captain Lewis perceived with the greatest delight a man on horseback at a distance of about two miles, coming down the plain toward them. On examining him with the glass, Captain Lewis saw that he was of a different nation from any Indians he had hitherto met. He was armed with a bow and quiver of arrows,

mounted on an elegant horse, without a saddle, and a small string attached to the under jaw answered as a bridle. Convinced that he was a Shoshonee, and knowing how much their success depended on the friendly offices of that nation, Captain Lewis was full of anxiety to approach without alarming him, and endeavored to convince him that he was a white man. He therefore proceeded on toward the Indian at his usual pace. When they were within a mile of each other the Indian suddenly stopped; Captain Lewis immediately followed his example, took his blanket from his knapsack, and holding it with both hands at the two corners, threw it above his head, and unfolded it as he brought it to the ground as if in the act of spreading it. This signal, which originates in the practice of spreading a robe or a skin as a seat for guests to whom they wish to show a distinguished kindness, is the universal sign of friendship among the Indians on the Missouri and the Rocky Mountains. As usual, Captain Lewis repeated this signal three times; still the Indian kept his position, and looked with an air of suspicion on Drewyer and Shields, who were now advancing on either side."

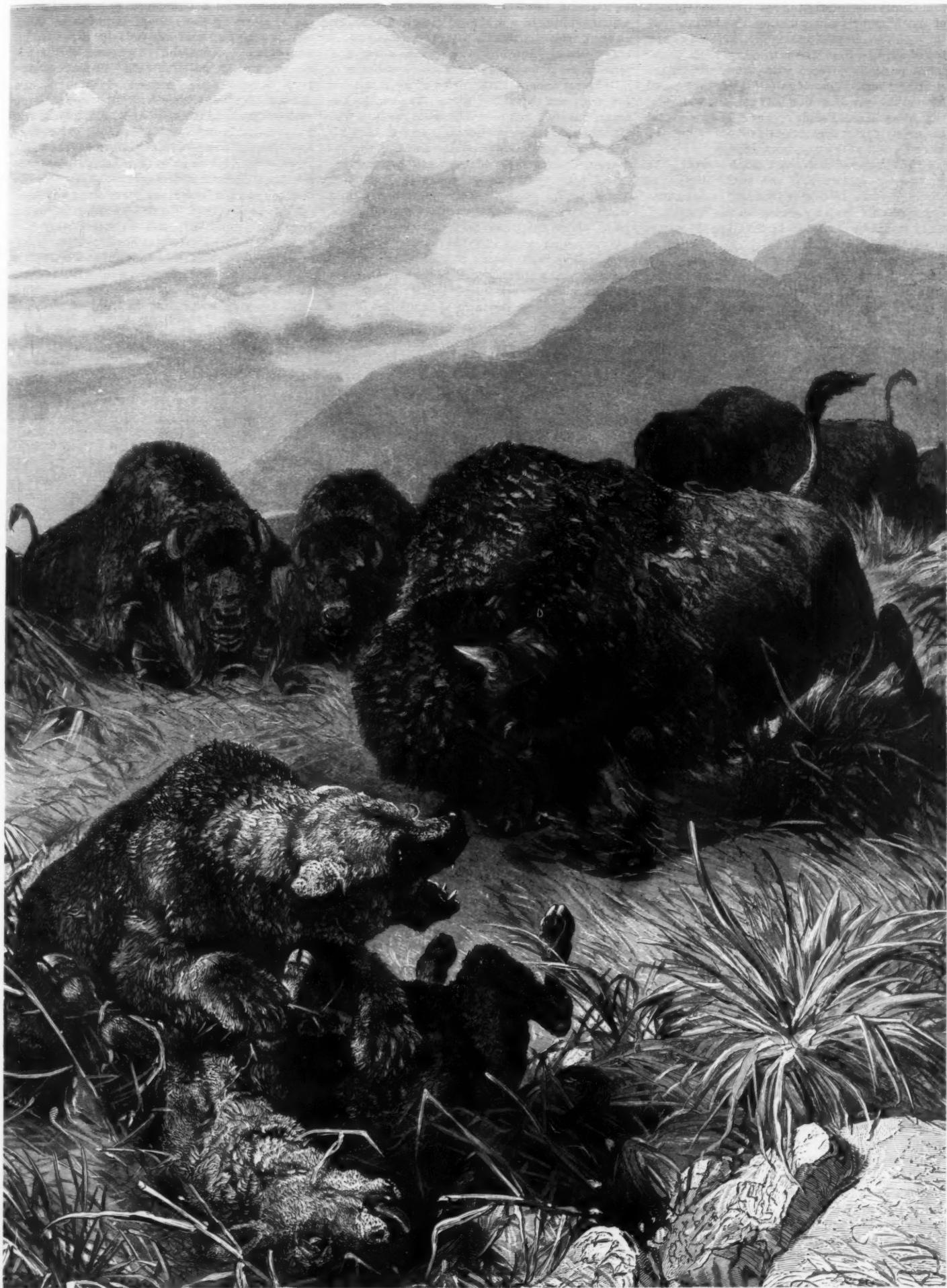
Captain Lewis then describes at considerable length how he tried to stop the advance of his men, how Drewyer obeyed, and Shields failed to observe his signals to halt. When they were within about one hundred yards of each other the Indian became alarmed, then suddenly turned his horse, and giving him the whip, leaped across the creek and disappeared in an instant among the willow bushes; with him vanished all hopes which the sight of him had inspired in Captain Lewis of a friendly introduction to his countrymen.

Though sadly disappointed by the imprudence of his two men, Captain Lewis determined to make the incident of some use, and therefore calling the men to him, they all set off after the track of the horse, which they hoped might lead them to the camp of the Indian who had fled, or if he had given the alarm to any small party, their track might conduct them to the body of the nation. Rain set in and the party encamped for the night.

On Monday, August 12, Captain Lewis set out to find the route of the Indians, over the mountains. He says: At a distance of about four miles they met a large, plain Indian road which came into the cove from the northeast and wound along the foot of the mountain to the southwest. This road they followed for five miles, and as it led them on towards the mountains the stream gradually became smaller, till after going two miles it had so greatly diminished in width that one of the men, in a fit of enthusiasm, with one foot on each side of the river, thanked God that he had lived to bestride the Missouri.

As they went along their hopes of soon seeing the waters of the Columbia arose to almost painful anxiety, when, after four miles from the last abrupt turn of the river, they reached a small gap formed by the high mountains, which recede on each side, leaving room for the Indian road. From the foot of one of the lowest of these mountains, which rises with a gentle ascent of about half a mile, issues the remotest waters of the Missouri. They had now reached the hidden sources of that river, which had never yet been seen by civilized man; and as they quenched their thirst at the chaste and icy fountain, as they sat down by the brink of that little rivulet which yielded its distant and modest tribute to the parent ocean, they felt themselves rewarded for all their labors and all their difficulties.

This was a day ever to be remembered by Captain Lewis and his men. Before the setting of that day's sun they achieved two other discoveries of as great moment. Captain Lewis describes these events in the following words: "They left



A FIGHT TO THE DEATH—A ROCKY MOUNTAIN SCENE IN THE TIME OF THE LEWIS AND CLARKE EXPEDITION.

reluctantly this interesting spot (the head springs of the Missouri) and pursuing the Indian road through the interval of the hills, arrived at the top of a ridge, from which they saw high mountains, partially covered with snow, still to the west of them. The ridge on which they stood formed the dividing line between the waters of the Atlantic and Pacific oceans. They stood on the crest of the great Continental Divide—the second event of the day.

"They followed a descent much steeper than that on the eastern side, and at the distance of three-quarters of a mile reached a handsome creek of cold water running to the westward. They stopped to taste for the first time the waters of the Columbia."

This was the third and crowning event of the day, and made this 12th day of August, 1805, still more memorable.

The directions of Sacajaweah, their woman

13, Captain Lewis resumed the Indian road, which led him in a westward direction through an open, broken country. After proceeding about nine miles he discovered two women, a man and some dogs on an eminence, at the distance of a mile before them. He unfurled a flag, laid down his arms and advanced along towards the Indians, but they fled before he could reach them. He then made a signal to his men and they all joined him and followed on the track of the Indians. The road seemed to have been much used lately, both by foot travelers and by horsemen. They had not gone along it more than a mile when on a sudden they saw three female Indians, from whom they had been concealed by deep ravines which intersected the road, till they were now within thirty paces of each other; one of them, a young woman, took to flight; the other two, an elderly woman and a little girl, seeing they were too near for them to escape, sat on the

companion, who had escaped to some distance, and by alarming the Indians might cause them to attack him without any time for explanation. She did as desired, and the young woman returned, almost out of breath. Captain Lewis gave her an equal portion of trinkets, and painted the tawny cheeks of all three of them with vermillion, a ceremony which, among the Shoshonees, is emblematic of peace. After they had become composed, he informed them, by signs, of his wish to go to their camp, in order to see their chiefs and warriors; they readily obeyed, and conducted the party along the same road down the river. In this way they advanced two miles, when they met a troop of sixty warriors, mounted on excellent horses, riding at full speed towards them. As they advanced, Captain Lewis put down his gun, and went with the flag about fifty paces in advance. The chief, who, with two men, was riding in front of the main



A VILLAGE OF SNAKE INDIANS, AS SEEN BY THE LEWIS AND CLARKE EXPEDITION.

guide, were observed, and all her predictions were fulfilled. They had followed one branch of the Missouri River to its ultimate source; they had crossed the Rocky Mountains and reached the headwaters of the Columbia, the river that ran westward to the great Pacific Ocean, and had seen a Shoshonee Indian; and with Sacajaweah as their interpreter, the success of the great expedition was assured, for the Snakes were her people, and she could speak the languages of the tribes to the Columbia, where the Snake River joins it. All honor to the first woman whose name appears on the printed pages of Montana history—Sacajaweah!

I shall describe as briefly as possible the meeting of Captain Lewis with quite a numerous band of the Shoshonee Indians and the restoration of Sacajaweah to her people. On Tuesday, August

ground, and holding down their heads, seemed reconciled to the death which they supposed awaited them. The same habit of holding down the head and inviting the enemy to strike, when all chance of escape is gone, is preserved in Egypt to this day.

Captain Lewis instantly put down his rifle, and advancing towards them took the woman by the hand, raised her up and repeated the words "tabba bone," at the same time stripping up his shirt sleeve to prove that he was a white man, for his hands and face had become, by constant exposure, quite as dark as their own. She appeared immediately relieved from her alarm, and Drewyer and Shields now coming up, Captain Lewis gave them some beads, a few awls, pewter mirrors and a little paint, and told Drewyer, the interpreter, to request the woman to recall her

body, spoke to the women, who now explained that the party was composed of white men, and showed exultingly the presents they had received. The three men immediately leaped from their horses, came up to Captain Lewis and embraced him with great cordiality, putting their left arm over his right shoulder and clasping his back, applying at the same time their left cheek to his, and frequently vociferating, "Ah-hi-e! ah-hi-e!" (I am much pleased; I am much rejoiced.)

The whole body of warriors now came forward, and the men received the caresses and no small share of the grease and paint, of their new friends. Then Captain Lewis lighted a pipe and offered it to the Indians, who had now seated themselves in a circle around the party. After smoking a few pipes, some trifling presents were distributed among them, with which they seemed

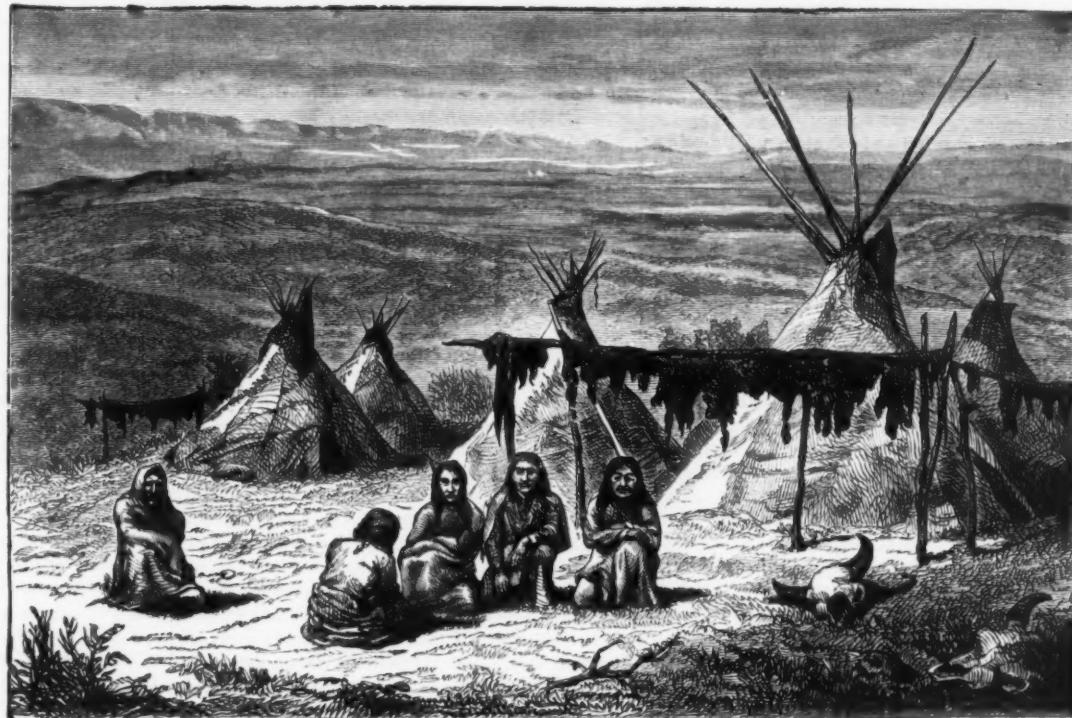
very much pleased, particularly with the blue beads and vermillion. Captain Lewis then informed the chief that the object of his visit was friendly and should be explained as soon as he reached their camp; but in the meantime, as the sun was oppressive, and no water near, he wished to go there as soon as possible. Their chief, whose name was Cameahwait, made a short speech to the warriors; Captain Lewis then gave him the flag, which, he informed him, was among white men the emblem of peace, and now that he had received it, it was in future the bond of union between them. The chief then moved on, the party followed him, and the rest of the warriors in a squadron brought up the rear.

At the distance of four miles from where they first met, they reached the Indian camp, which was in a handsome, level meadow on the bank of the river. After being seated in a leathern lodge, on green boughs and antelope skins, the chief produced his pipe and tobacco and lighted it; it was passed around and all smoked it. This ceremony being concluded, Captain Lewis explained to the chief the purposes of his visit; and as by this time all the women and children of the camp had gathered around the lodge to indulge in a view of the first white men they had ever seen, he distributed among them the remainder of small articles he had brought with him.

It was now late in the afternoon and the party had tasted no food since the night before. On apprising the chief of this circumstance, he said that he had nothing but berries to eat, and presented some cake made of service-berries and choke-cherries, which had been dried in the sun. On these Captain Lewis made a hearty meal, and then walked down toward the river, which was undoubtedly the Lemhi fork of the Salmon River. Captain Lewis returned from the river to the lodge, and on his way an Indian invited him into his bower and gave him a small morsel of boiled antelope and a piece of fresh salmon, roasted. This was the first salmon he had seen, and perfectly satisfied him that he was on the waters of the Pacific Ocean.

Having had a good night's rest, and also having received the good will of Cameahwait, Captain Lewis, on the next morning, the 14th of August, informed him of his wish that he would speak to the warriors, and endeavor to engage them to accompany him to the forks of the Jefferson River, where by this time another chief, with a large party of white men, was waiting his return; that it would be necessary to take about thirty horses to transport the merchandise; that they should be well rewarded for their trouble; and that when all the party should have reached the Shoshonee camp, they would remain among them and trade for horses, as well as concert plans for furnishing them in future with regular supplies of merchandise. He readily consented to do so, and after collecting the tribe together he made a long harangue, and in about an hour and a half returned and told Captain Lewis that he would be ready to accompany him in the morning.

On the 16th day of August, Captain Lewis, accompanied by Cameahwait and twenty-five men,



INDIANS CURING SALMON AT THE DALLES OF THE COLUMBIA RIVER.

women and children of his tribe, traveled on down toward the Jefferson River to meet Captain Clarke and his party with the canoes; but the Indians were full of suspicion that they would be betrayed by the whites. Captain Lewis had considerable trouble in allaying their fears, and had to use much diplomacy. He had promised liberal exchanges for their horses; but what was still more seductive, he had told them that "one of their countrywomen (Sacajaweah), who had been taken by the Minnetarees, accompanied the party below; and one of the men had spread the report of our having with us a man perfectly black, whose hair was short and curled. This last account had excited a great degree of curiosity, and they seemed more desirous of seeing this monster than of obtaining the most favorable barter for their horses."

We come now to the most interesting and exciting episode of this story, and I feel I must give the account in full, as printed in Lewis and Clarke's journal. It is as follows: "Saturday, August 17, 1805, Captain Lewis rose very early, and dispatched Drewyer and the Indian down the river in quest of the boats. Shields was sent out at the same time to hunt, while McNeal prepared a breakfast out of the remainder of the meat. Drewyer had been gone about two hours and the Indians were all anxiously waiting for some news, when an Indian, who had straggled a short distance down the river, returned with a report that he had seen the white men, who were only a short distance below, and were coming on. The Indians were all transported with joy, and the chief, in the warmth of his satisfaction, renewed his embrace to Captain Lewis, who was quite as much delighted as the Indians themselves. The report was agreeably true.

"On setting out at seven o'clock, Clarke, with Chaboneau and his wife, walked on shore, but they had not gone more than a mile before Captain Clarke saw Sacajaweah, who was with her husband one hundred yards ahead, begin to dance and show every mark of the most extravagant joy, turning around to him and pointing to several Indians, whom he now saw advancing on horseback, sucking her fingers at the same time, to indicate that they were of her native tribe. As they advanced Captain Clarke discovered

among them Drewyer, dressed like an Indian, from whom he learned the situation of the party. While the boats were performing the circuit he went toward the forks with the Indians, who, as they went along, sang aloud with the greatest appearance of delight. We soon drew near to the camp, and just as we approached it, a woman made her way through the crowd towards Sacajaweah, and recognizing each other, they embraced with the most tender affection. The meeting of these two young women had in it something peculiarly touching, not only in the ardent manner in which their feelings were expressed, but from the real interest of their situation. They had been companions in childhood; in the war with the Minnetarees they had both been taken prisoners in the same battle, they had shared and softened the rigors of their captivity, till one of them had escaped from the Minnetarees, with scarce a hope of ever seeing her friend relieved from the hands of her enemies.

"While Sacajaweah was renewing among the women the friendships of former days, Captain Clarke went on and was received by Captain Lewis and the chief, who, after the first embraces and salutations were over, conducted him to a sort of a circular tent or shade of willows. Here he was seated on a white robe, and the chief immediately tied in his hair six small shells resembling pearls, an ornament highly valued by these people, who procured them in the course of trade from the sea-coast. The moccasins of the whole party were taken off (which indicates the sacred sincerity of their professions when they smoke with a stranger) and after much ceremony the smoking began. After this the conference was to be opened, and glad of an opportunity to converse more intelligibly, Sacajaweah was sent for. She came into the tent, sat down, and was beginning to interpret, when, in the person of Cameahwait she recognized her brother; she instantly jumped up and ran and embraced him, throwing over him a blanket and weeping profusely. The chief was himself moved, though not in the same degree. After some conversation between them, she resumed her seat and attempted to interpret for us, but the new situation seemed to overpower her, and she was frequently interrupted by her

tears. After the council was finished the unfortunate woman learned that all her family were dead except two brothers, one of whom was absent, and a son of her eldest sister, a small boy, who was immediately adopted by her.

"The canoes arriving soon after, we formed a camp in a meadow on the left side, a little below the forks, took out our baggage, and by means of our sails and willow poles formed a canopy for our Indian visitors. About four o'clock the chiefs and warriors were collected, and after smoking, the purposes of the visit of Captains Lewis and Clarke were fully explained to them. One great object was to assure them of the good wishes of our Government, on whose good will they must depend for all future supplies of whatever was necessary for their comfort or defense; that they were sent to discover the best route by which merchandise could be conveyed to them, and that no trade would be begun before their return; that it was mutually advantageous that they should proceed with as little delay as possible; that it was necessary for them to furnish horses to transport their baggage across the mountains, and a guide to show the route, and that they should be amply repaid for their horses and services." This seemed satisfactory to the Indians, and medals and presents were distributed among them on their promise to sell to the whites horses and to furnish them guides.

The services of Sacajaweah as an interpreter and guide, from the time the expedition had reached the Three Forks of the Missouri, where she had been captured five years before, and knew the country and route to pursue, until the fortunate meeting with Cameahwait, her brother, who was chief of her own tribe of Shoshonees, and their warm and welcome reception of their lost sister, were fully appreciated by Captains Lewis and Clarke, and her explanation of the character of those men and the object of their visit to their country settled the minds of the Indians in favor of the white men. From then on they were their firm friends who sold them all the horses they wanted for their journey across the mountains, until they reached the forks of the Chopunnish River, where they form Kooskooske River, (which is a principal branch of the Snake River) where they found a tribe of Indians called the Chopunnish, or Pierce-nose—or Nez Perces.

"August 30, 1805. Took leave of the Shoshonees, who set out on their trip to the Missouri at the same time that we, accompanied by the old guide, his four sons and another Indian, proceeded on our journey. On reaching Tower Creek we left the former track of Captain Clarke and began to explore the new route, which is the last hope of our getting out of the mountains.

"On September 1, reached Fish Creek, which is a fork of the Lemhi River, a branch of the Salmon River. This morning, Sept. 2nd, all the Indians left except the guide who conducted the party up Fish Creek. At four miles up we passed a branch coming in from the right. The road turned up the east side of the forks, and, as our guide informed us, led to the Missouri, so we cut our road up the next branch of the creek, and after great difficulties in cutting through great thickets of brush and trees, over high, rugged and rocky ground, made five miles and camped on a small branch of Fish Creek. The snow fell two inches in the night, and our last thermometer was broken—a serious misfortune.

"Wednesday, Sept. 4th, crossed a high mountain, which forms the dividing ridge between the waters of Fish Creek and those running to the northwest. After going six miles, reached the head of a small stream from the right, which ran westward. Went down the stream six miles till it emptied into a river from the east. In the wide valley at this juncture we discovered a large encampment of Indians, and were received with

great curiosity. They are called Ootlashoots, and are a band of a nation called Tushepaws, or Flatheads, residing on the heads of the Missouri and Columbia rivers, some of them lower down the latter river, near the head of the Bitter Root River." This camp was at the place now called Ross' Hole.

On Sept. 6th, the Ootlashoots set off to join the different bands, who were collecting at the Three Forks, on their way to the Yellowstone to hunt buffalo. The expedition at the same time started down the river on its east side, to which was given the name of Captain Clarke, he being the first white man who had ever visited its waters.

On Monday, Sept. 9th, they crossed the river to the west side, and at night camped on a fine, bold creek of clear water, about twenty yards wide, coming in from the west, which they called Travelers' Rest (now called the Lou Lou). The guide told them they would here leave the river (Clarke's Fork) and go up the Lou Lou to cross the mountains to the west. The guide also told them that he did not know where Clarke's Fork discharged its waters, but said that as far as he knew its course, it ran along the mountains to the north, and that not far from their present position it was joined by another stream nearly as large as itself (now called the Deer Lodge or Hellgate River) which rises in the mountains to the east, near the Missouri, which might be reached in four days' travel. (Via the Big Blackfoot and the Dearborn or Sun rivers W.)

On the evening of Sept. 10th, a hunter returned with three Indians whom he had met on his excursion up Travelers' Rest Creek (the Lou Lou). The Shoshonee guide could not speak their language, but by signs found they were Tushepaw Flatheads. They were well treated and given presents. Two soon left in pursuit of two men, supposed to be Shoshonees, who had stolen twenty-three head of their horses. The third was, however, persuaded to remain and conduct the party to his relations. These, he said, were numerous, and resided on the Columbia, in the plains below the mountains. From this place, he added, the river was navigable to the ocean. The distance was "five sleeps," or a day's journey.

The next day, Sept. 11, the Tushepaws left and set out to return home alone, and the expedition proceeded on up the Lou Lou. On the 14th, after many hardships, they crossed the last high ridge of mountains and camped on the Chopunnish River, a branch of Snake River, now called the Clearwater. On the 21st they were near the mouth of the Chopunnish, and found two Indian villages of about thirty double tents, and the inhabitants called themselves Chopunnish, or Pierce-nose. From here they went on down the river until they found suitable trees for the making of canoes, at the juncture of the Chopunnish and Kooskooske rivers.

The canoes, five in number, were completed by the morning of October 7th, and the whole party started down the Kooskooske, "and in two days after entering Lewis or Snake River reached its mouth, where it enters the Columbia, at Wollaw Wollah." They arrived there on the evening of the 10th of October.

Captain Clarke changed the name of Snake River to Lewis River, because Captain Lewis was the first white man to see it, of all their party. In return for this compliment Captain Lewis, when the expedition had crossed the Rocky Mountains from the Wisdom or Big Hole River to Ross' Hole at the head of a stream running to the north (now called Bitter Root River) down which the expedition passed on its east side, named this river Clarke's River, or Clarke's Fork.

With help from Indians, the expedition of Captains Lewis and Clarke arrived in sight of the Pacific Ocean on the 16th of November, 1805,

and went into camp at Haley's Bay, on the north side of the Columbia, eleven miles from Cape Disappointment, where they remained until the 25th. A site for their winter camp was finally selected by Captain Lewis on December 7th. It was situated near the ocean, on the south side of the Columbia, on the right hand, between them, and in sight of both. Here comfortable winter quarters were built from massive trees, and here they spent the long, wet and dreary winter of 1805-6. They named the place Fort Clatsop.

On the 23rd of March, 1806, the expedition left Fort Clatsop for the long and wearisome journey back to the East and civilization. Of this wonderful journey I shall give but little account, except as relates to the services of Sacajaweah. The journal says: "Monday, June 30th, we reached our encampment at the south side of Travelers' Rest Creek (the Lou Lou) near its entrance into Clarke's River. This was the point where we proposed to separate; Captain Lewis, with nine men, to pursue the most direct route to the Missouri. The rest of the men will accompany Captain Clarke to the head of the Jefferson River and proceed to the Yellowstone at its nearest approach to the Three Forks of the Missouri, build canoes and go down that river, and wait at its mouth until the rest of the party with Captain Lewis joins him."

On July 3rd, Captain Lewis, with nine men and five Indians, proceeded due north down the west side of Clarke's River. About sunset they camped, and the Indians showed them a road which they said would lead up to the eastern branch of Clarke's River, (now the Hellgate) and another river called Cokalahishkit (now the Big Blackfoot) or "the river of the road to buffalo;" thence to Medicine River and the falls of the Missouri. Captain Lewis followed this route and reached the falls safely, and eventually joined Captain Clarke's party below the mouth of the Yellowstone River, as agreed upon.

Captain Clarke left Captain Lewis on July 3rd, with fifteen men and fifty horses, and proceeded up the west side of Clarke's River from Travelers' Rest Creek, and rode in a southern direction to its head at the summit of the Rocky Mountains, which they crossed on July 5th at four o'clock in the afternoon into the valley where they had first seen the Flatheads the previous year. The journal then says: "Sunday, July 6, the night was very cold, succeeded by frost in the morning; and as the horses were much scattered, we were not able to set out much before nine o'clock. We went along the creek for three miles, and leaving to the right the path by which we came last fall, pursued the road taken by the Ootlashoots (Flatheads) up a gentle ascent to the dividing mountain which separates the waters of the middle fork of Clarke's River from those of Wisdom and Lewis rivers. On reaching the other side (east) we came to Glade Creek, down which we proceeded, crossing it frequently into the glades on each side, where the timber is small, and in many places destroyed by fires, where are great quantities of quamash, now in bloom. Along the roads are appearances of buffalo paths, and some old heads of buffaloes; and as the animals have wonderful sagacity in the choice of their roads, the coincidence of a buffalo with an Indian road was the strongest assurance that it was the best. (These roads were over the very crest of the Rocky Mountains, between the head of Clarke's Fork and Wisdom rivers.) In the afternoon we passed along the hillside north of the creek, till, in the course of six miles, we entered an extensive, level plain. Here the tracks of the Indians scattered so much that we could no longer pursue them. But Sacajaweah recognized the plain immediately. She had traveled it often during her childhood, and informed us it was the great resort of the Shoshonees, who came for the purpose of gathering quamash, and cows, and of

taking beaver, with which the plain abounded, and that Glade Creek was a branch of Wisdom River, and that on reaching a higher part of the plain we should see a gap in the mountains, on the course to our canoes, and from that gap a high point of mountains, covered with snow. At the distance of a mile we crossed a large creek from the right, rising, as well as Fish Creek, in a snowy mountain, over which there is a gap. Soon after, on ascending a rising ground, the country spreads itself into a beautiful plain, extending north and south about fifteen miles wide and thirty in length and surrounded on all sides by high points of mountains covered with snow, among which was the gap pointed out by the squaw, bearing S. 56° E."

On July 8th, Captain Clarke reached the forks of the Jefferson, where the canoes had been deposited in the month of August last. They were found safe, except a small hole in one. On July 13th, the party reached the mouth of the Madison River, and the horses were driven across the Madison and Gallatin rivers, and the whole party halted to dine and unload the canoes below the mouth of the latter. Here Captain Clarke's command separated into two parties. Sergeant Ordway and nine men set out in six canoes to descend the river (to join Captain Lewis at the Great Falls) while Captain Clarke, with the remaining ten, and the wife and child of Chaboneau, were to proceed by land, with fifty horses, to the Yellowstone. In the afternoon Captain Clarke's party set out up the Gallatin, and after traveling four miles camped on the bank of the Gallatin. Game was abundant. The plain was intersected by several great roads leading to the gap in the mountains about twenty miles distant, in a direction east by northeast, but the Indian woman Sacajaweah, who was acquainted with the country, recommended a gap more to the southward. This course Captain Clarke determined to pursue, and therefore on the morning of the 14th crossed Gallatin River, in a direction south, 78° east, and passing over a level plain, reached the Jefferson at a distance of six miles. The squaw (Sacajaweah) now assured Captain Clarke that the large road from Medicine (Sun) River to the gap they were seeking crossed the upper part of this plain.

After dinner they continued, inclining to the southeast, through an open, level plain, till, at the distance of twelve miles, they reached the three forks of the Gallatin River. On crossing the southerly branch they fell into the buffalo road described by the squaw, which led them up the middle branch two miles. After crossing they went on a mile further and encamped in the mountains (which was without doubt the present Bozeman Pass, W.) Several roads came in from the right and left, all tending to the gap. The passage through this gap is described as follows: Tuesday, 15th, after an early breakfast, they pursued the buffalo road over a low gap in the mountain to the heads of the eastern fork of the Gallatin River, near which they camped last evening, and at the distance of six miles had reached the top of the dividing ridge which separates the waters of the Missouri and the Yellowstone; on descending the ridge they struck one of the streams of the latter river. They followed its course through an open country, with high mountains on each side, partially covered with pine, and watered by several beaverdams. Nine miles from the top of the ridge they reached the Yellowstone itself, about a mile and a half from where it issues from the Rocky Mountains (where the city of Livingston now stands).

It now appeared that the communication between the two rivers was short and easy. From the head of the Missouri, at the Three Forks, to this plain, is a distance of forty-eight miles, the greater part of which is through a level plain; indeed, from the forks of the eastern branch of

the Gallatin River, which is there navigable for small canoes, to this part of the Yellowstone, the distance is no more than eighteen miles, with an excellent road over a high, dry country, with hills of inconsiderable height, and no difficulty in passing. They halted three hours to rest their horses, and then pursued the buffalo road along the bank of the river.

I have been thus particular in describing the route and journey of Captain Clarke from the summit of the Rocky Mountains, at their very crest, between the head of Clarke's Fork (now the Bitter Root River) and Big Hole, at the head of Wisdom River, because on that crest Sacajaweah, with unerring precision, pointed out the way to the Yellowstone, and guided thither the expedition, never faltering in her knowledge or memory of the country, although she had not seen it since she was a girl, six years before, when she was captured by the Minnetarees, and carried over the pass and down the Yellowstone to their country on the Missouri; and because this was the last great service she performed for the Lewis and Clarke expedition.

I might close the story of this remarkable woman (the first woman mentioned in Montana history) here, but I feel that I would not do her the justice she deserves did I not give an account of her safe arrival at her home at the Mandan village, and therefore quote the appreciative language of Lewis and Clarke's journal, on their taking leave of her husband, Chaboneau, both of whom had served their expedition so faithfully. It will be entirely unnecessary to describe the voyage down the Yellowstone and Missouri rivers, as it is fully given in the narrative of Lewis and Clarke.

As stated above, Captain Clarke arrived at the Yellowstone on the 15th of July, and, with his party, after stopping three hours to rest their horses, pursued the buffalo road along the river. On July 20th, the party camped opposite the mouth of the Rosebud, and in the morning twenty-four of their horses were missing—stolen by the Indians (Crows), and here Captain Clarke built canoes. On the 23rd two large canoes were finished, and the party embarked for a voyage down the swift Yellowstone, which was accomplished in safety. On August 12th, just one year from the day Captain Lewis had crossed the summit of the Rocky Mountains on the westward journey and drank out of the clear, ice-cold spring whose waters flowed into the Pacific Ocean, he joined Captain Clarke on the Missouri, below the mouth of the Yellowstone, and after resting awhile, all embarked together at three o'clock, and resumed their voyage down the river. On Thursday, August 14th, they arrived at the Mandan village, where all the inhabitants seemed much pleased at seeing them. They had left for the voyage up the Missouri on the 7th of April, 1805, and thus had been absent one year, four months and one week, had endured untold hardships and had most satisfactorily accomplished the object of their long journey. They related their many adventures to the Mandans, and were given corn in abundance.

Captains Lewis and Clarke were extremely anxious to have some of the Mandan or Minnetaree chiefs accompany them to visit their great father, and thus describe their leave-taking of the Indians, and of Sacajaweah and Chaboneau: "Saturday, August 16th, 1806. The principal chiefs of the Minnetarees came down to bid us farewell, as none of them could be prevailed upon to go with us. This circumstance induced our interpreter, Chaboneau, with his wife, Sacajaweah, and child, to remain here, as they could be no longer useful; and notwithstanding our offers of taking them with us to the United States, he said that he had there no acquaintances, and no chance to make a livelihood, and preferred remaining among the Indians. This man had

been very serviceable to us, and his wife, Sacajaweah, particularly useful among the Shoshonees. Indeed, she has borne with a patience truly admirable the fatigues of so long a route, encumbered with the charge of an infant, who is even now only nineteen months old. We therefore paid him his wages, amounting to five hundred dollars and thirty-three cents, including the price of a horse and a lodge, purchased of him, and soon after dropped down to the village of the chief, Bigwhite (who had consented to accompany us to Washington), attended on shore by all the Indian chiefs, who went to take leave of him."

A storm preventing their proceeding that day, on Monday, August 18th, they embarked, and bid a final farewell to their Indian friends, the Mandans. After a prosperous voyage, the famous expedition of Lewis and Clarke "rounded to at Saint Louis, where we arrived at twelve o'clock on Tuesday, September 23rd, 1806, and having fired a salute, went on shore and received the heartiest and most hospitable welcome from the whole village."

BISHOP WHIPPLE IN LONDON.

Says the St. Paul *Dispatch* of recent date: There was a familiar Minnesota voice that sounded through the sacred aisles of Westminster Abbey and a familiar Minnesota name that echoed around the tombs of English kings. Col. Stanford Newell and Major Thomas P. Wilson, securing leave of absence, had gone to London to look at the heights and depths of the world's capital, and their reverent feet had brought them first to the storied abbey, receptacle of princely fragments that had once bestrode the world, like Colossi, but were then in the same predicament as the late Yorick, so briefly known to fame. At the entrance to the great abbey they had met a spruce London policeman, and in answer to their questions as to whether they might enter they had received a stiff assent. Entering the place the two Americans and popular St. Paul gentlemen made their way through the crowd and stood gazing at the statues, when they thought they heard the name "Sibley" pronounced by the speaker who was addressing the audience from the chancel.

It was very strange, they thought, the name of their old friend spoken in that place and at a time so unexpected, just as they had fairly entered. It sounded to them like a pleasant greeting from home, and they made their way up the aisle to see what it might mean. What was their astonishment to see another of their friends, Right Rev. Bishop Whipple of Faribault, Minn., speaking to the multitude. There was the lined, solemn, intense face, the thrilling voice, the effective gesture. The singularly impressive personality of the man was evidently making an impression on the audience, and the subject on which he was speaking was plainly one that interested the British crowd in his front. He was telling them of the Indians of the Northwest, of the conquests of the religion of Christ over their savage hearts, of the success that had crowned the hard labors of many years, and he mentioned the honored name of Gen. H. H. Sibley, the faithful friend of the Indian, the pioneer, the scholar, soldier and gentleman. What more apt illustrations could he have used? Turning to Col. Newell, Maj. Wilson remarked: "Well, this does not seem to be very far from home after all."

LOOSEN YOUR CHECK REIN.—Over five hundred veterinary surgeons have signed a paper condemning tight check reins, as painful to horses and productive of disease, causing distortion of the windpipe to such a degree as to impede respiration. They mention paralysis of the muscles of the face, megrims, apoplexy, coma and inflammation as some of the results of its use.

GALLATIN VALLEY, MONT.

BY PROF. S. M. EMERY, DIRECTOR OF THE MONTANA EXPERIMENT STATION, BOZEMAN.

The Gallatin Valley, situated midway east and west of the State and 100 miles north of the southern boundary, is formed by the Bridger, Gallatin and Madison mountains, the opening of the valley lying to the north, forty miles from its southern apex, where the Jefferson, the Madison and the Gallatin rivers, uniting, form the Missouri, which forces itself through the main range, a few miles below on its way to the sea. This valley, circular in shape, contains about 1,000 square miles and is watered by the two main branches of the Gallatin River proper, the East Gallatin and the West Gallatin. The former has its source in two mountain streams, the Bridger and Bozeman respectively, the latter in small lakes lying in Big Horn Pass, in the Yellowstone National Park. In addition to these main tributaries are the following mapped streams: The Reese, Middle, Cottonwood, McCameron Pass and Churn, together with not less than 100 unnamed streams which make their way from coulee and canyon to swell the volume of the Gallatin, whose aggregate waters render this basin the best watered of all Rocky Mountain valleys.

These streams are fed by snow deposited almost every month of the year upon the lofty mountain ranges, and this valley is one of the few from which perpetual snow may be seen. The heavy snow-falls occur from October until March, and melting in great part as they do in the months of May, June and July, offer to the ranchmen that most inestimable boon, a bounteous water supply at the very time when it is of the

most benefit to the crops. The West Gallatin River has been variously estimated to contain from 125,000 to 216,000 inches of water, with a fall of thirty feet to the mile; the Missouri River in its entire length has an average fall of only nine inches to the mile; the Northern Pacific survey shows the fall of the upper Yellowstone River to be about thirteen feet to the mile, and on the lower reaches of this river the fall is only seven feet to the mile.

With these comparisons it may be readily understood the ease with which water may be conducted from the Gallatin to the farming lands below. These natural advantages of the Gallatin River have been well utilized, as a list of the ditches will show. Of public or corporation ditches there are the following: the Middle Ditch Company, with a capacity of three thousand inches, in which about forty farmers are interested; the West Gallatin Canal Company, twenty-four miles in length, with a capacity of 5,000 inches; the Excelsior Canal Company, with a capacity of 5,000 inches; the Lower Middle Creek Ditch Company, with a capacity of 2,000 inches and twelve owners; the Nelson-Flannery Ditch Company, with a capacity of 400 inches and six owners; the Moreland Canal Company, with a capacity of 2,500 inches; the Farmer's Ditch Company, with a capacity of 1,500 inches; the High Line Canal Company, owned by the Manhattan Ditch Company, 58 miles in length, with a capacity of 5,000 inches;—constituting a total capacity of 24,400 inches of water in corporation ditches. In addition to these there are innumerable private ditches, in which one or more neighbors have united to accomplish the required task of conveying the water from the bed of the

stream onto their lands. These rights are all acquired under due process of law, and are maintained by using the water from year to year, except in seasons when there is no necessity for its use, owing to an excess of rain-fall during the growing season.

The purity of the water of the mountain streams mentioned is shown by the following analysis:

	Grains in 1 Parts in 1,000.	U. S. Gal.
Organic and Volatile Matter.....	.0320	1.87
Silica.....	.0050	.29
Alumina.....	.0025	.14
Bicarbonate of Iron.....	.0012	.07
Bicarbonate of Lime.....	.1247	7.27
Bicarbonate of Magnesia.....	.0898	5.66
Chloride of Sodium.....	.0027	.16
Chloride of Magnesia.....	.0021	.12
Sulphate of Potassium.....	.0002	.01
Sulphate of Lime.....	.0234	1.36
Temporary Hardness.....	.1750	10.26
Permanent Hardness.....	.1050	6.12
Free Ammonia.....	.0015 parts in 1,000,000	
Albumenoid Ammonia.....	.0020 parts in 1,000,000	

The Gallatin was one of the first valleys to be settled and is considered the ranking agricultural valley of the State. In the past few years there have been opened up a great many farms on what are called the "bench lands," which are high-lying plateaus situated on the foothills of the mountains, and from their altitude and proximity to the main ranges they receive an amount of moisture during the year far in excess of the valley lands. These bench-land farms are wonderfully adapted to winter grain—more so than other sections, in or out of the State. Cases well authenticated are on record of 65 bushels of wheat and of 62 bushels of barley per acre, grown on these lands without irrigation, and in fact the crops have as yet never failed on these lands on



LOOKING OVER THE MANHATTAN BARLEY FARM, GALLATIN VALLEY, MONT.

the eastern side of the valley, where the most of this improvement has been made.

Compared with other regions of the State this valley is well settled. It is traversed by highways on section lines, and during the major part of the year the natural roads are unexcelled. The improvements are good and one accustomed to the prairie States to the east will be struck with the resemblance to them—in the broad, well-kept fields, the commodious houses and barns that grace many of the farms, and the general appearance of thrift and prosperity to be seen on every hand. Should one permit his gaze to pass beyond the bounds of cultivation over the wonderful panoramas of beauty unfolded to his view as his eyes wander toward the mountains whose lofty snow-crowned heights tower upward, half-lost in purple distance or floating cloud, he might well persuade himself that he is looking into the promised land.

The mildness of the seasons has been one potent factor in the settlement of this region. The snow-fall is usually ample to afford the farmer full opportunity to get out the winter's wood, fencing and other material required to improve his ranch. There are few days when one cannot work or walk without an overcoat. Live stock in summer find an abundant living in the mountains and foothills and are brought inside the fields in the fall and pass through the winter in good order from the forage on the meadows, supplemented by the straw-stacks and without shelter other than that of the willow thickets bordering the streams. From these conditions it may readily be seen that the climate of the Gallatin is exceptionally mild, considering its altitude.

Within the bounds of this second edition of the "Garden of Eden" is situated the county seat, the city of Bozeman; and in the suburbs of Bozeman, and of easy of access by the electric street railway, is located the Experiment Station farm, upon 160 acres of exceptionally fine land, donated by the citizens of Gallatin Valley for this purpose. Upon the director of the station and his staff of co-workers will devolve the conduct of experiments that will add to the record of this, one of the most fertile spots on the globe. The dairy industry will be encouraged and stimulated with all possible vigor; poultry and swine will be made subjects of thorough experimentation. The wonderful results obtained in many parts of the State in fruit culture, both small and standard, warrant this in being made an object of thorough investigation, with the end in view of the proper selection of varieties and their cultivation. This department will be under the management of the director. The study and development of agricultural experiment will be under the immediate supervision of Luther Foster, professor of agriculture in the Experiment Station and the Montana Agricultural College, whose experience was gained as director in charge and professor of agriculture in the South Dakota Experiment Station.

The diseases of domesticated animals, particularly of those on the ranges which have suffered from imperfectly understood disorders and fatal contagious diseases, will claim the attention of the veterinarian of the station, Dr. W. L. Williams, who came to the State as ex-president of the National Association of Veterinary Surgeons as well as that of the State association of Illinois and Indiana, and with ripe experience gained in a practice of thirteen years in the leading heavy draft-horse county of the United States. The chemist of the Experiment Station and Agricultural College, Dr. F. W. Traphagen, has an enviable record gained in the College of Montana, Deer Lodge, and is considered one of the best mineralogists in the State; and with the well-equipped chemical laboratory of the station will render most efficient service in the analyses of water, soil, forage, plants and dairy products.

The president of the college, Mr. A. M. Ryon, has charged himself with the special study of the water, and of the science of irrigation. This is a study of the very highest degree of importance to semi-arid States, and the high standing of President Ryon as a civil engineer is sufficient warrant that the duty will be well done.

It may be said without fear of successful contradiction that in no other section of the great and growing West are to be found more or better inducements to the intending settlers. This is especially true of opportunity for dairy, swine and poultry production. The demand is first-class for these products, and that farmer who is prosecuting his labors on lands that can be irrigated is always sure to reap a plentiful harvest; the uncertainty of a paying yield is entirely eliminated and the laborer is sure of his reward.

NORTH NOOKSACK FALLS.

The falls of the north fork of the Nooksack are the finest on the Coast, not so high as Snoqualmie, but the surrounding scenery makes it a wonderful sight. The falls are 125 feet high. The river pours down through a canyon for one and a half miles above, with broken walls covered by masses of heavy timber and the mountains sweeping up on the north into the Church Mountain Range 7,000 feet, and on the south to a mighty spur that runs back to Baker with its glaciers and everlasting snows. Just at the falls, coming from the south, fed by a glacier, comes Wells Creek and pours its milky water into the caldron below them, and then the clear green waters of the upper river are churned and mixed with it. The water separates into two currents as it leaves the tops and leaves a miniature goat's island in the midst. In front of the north channel juts out a mighty wall of black mossy rock, against which the spray for countless ages has foamed and dipped; from in front of the south channel pours a mighty gale which has blown—who knows how long? Starting on the point in front it takes one just the time to run at full speed across that gale, charged as it is by spray, to become drenched. There is no need, however, for that unless one wishes to look up Wells Creek and see the creamy flood tumbling down over the masses of boulders that form its bed. Below the falls for several hundred feet still tower the walls of rock, and looking up from their foot one realizes how small man is after all, and how mighty and resistless are the forces that surround him.—Whatcom (Wash.) Reveille.

MINES OF MONTANA.

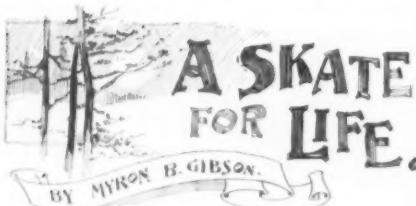
There are a number of facts regarding mining in Montana that Eastern and foreign capitalists seem never to have understood or comprehended. It is doubtful if even the average citizen of Montana realizes how far his State excels, by comparison, any other region of the country, in the industry of mining. With a total population of less than one-half that of a single city in California, and numbering but few more persons than is claimed as the population of the chief city in Colorado, with comparatively few years and little money expended in the development of its mines, Montana far excels California or Colorado (or any other State) in its annual money value production of universal wealth. It is even probable that a single mining company in Montana, the Anaconda, turns out annually very nearly or quite as much profit as all the mines combined of either Colorado or California.

It is altogether probable that if as much money and time had been expended in mining development in Montana as there has been in Colorado or California, that the present out-put of mineral wealth in Montana would excel the combined

production of California, Nevada, Utah, Colorado, Arizona and New Mexico. The reports of the Secretary of the Treasury of the United States prove that the per capita wealth production of Montana far exceeds that of any other State in the Union. There are good and sufficient geological and physical reasons why Montana (and Idaho) should surpass, in mineral wealth, any other region of the continent. These reasons have been clearly and comprehensively stated by Dr. A. D. Churchill, formerly of the Columbia School of Mines, and generally recognized as one of the leading mining engineers of America, as follows:

"I am familiar, by personal observation and experience, with the mining districts of Arizona, California, Colorado, Nevada, Utah, Idaho, Montana and the Lake Superior region. Montana mining, as it is now carried on, differs from that of other States and Territories in several respects, especially so in the fact that a large proportion of the Montana mines are fissure veins in granite. This is a fact of the very greatest importance, for to it is due the permanency of the mines and their constantly increasing output. I regard Montana, as a whole, to be the best region in America for mining investments or development. Montana leads all other States and Territories as a producer of the precious metals, including copper. The ratio of Montana's increase from year to year has been much larger than that of any other region in this country. This is due to two facts: First, the permanent character of its veins, together with their large size; second, to the methods by which the mines have been developed. The mining business first started in Montana developed only the placer. It is well known that very large sums of money were taken from Last Chance, Confederate, Alder and other famous gulches, and much of the wealth thus produced remained in the Territory. That money enabled mining men to develop their mines with their own capital. Montana is, in fact, the only State where its leading bankers are also its leading mining men; a condition of great importance, insuring financial stability to the mining business in that region not so fully enjoyed by any other locality. The accumulated wealth in the money centers of Montana, resulting directly from the products of the mines, is very large. Much of this money has furnished the capital which stocked the ranges with sheep and cattle, and has fostered and developed agricultural interests. This comparative independence of outside capital is perhaps the certain guarantee that the development of Montana will progress more rapidly than any other mineral region.

"The natural facilities for mining in Montana are unsurpassed. First, the altitude of the mining districts is very low, compared with other mining regions, thus permitting the easy construction of railroads and highways, and rendering the climate mild and equitable. The rainfall throughout the district is sufficient, and the wood and water—so important to successful mining—are abundant. The altitude of the highest mines in Montana is less than that of most of the lowest districts in other regions of the mountain system. Here the parallel ranges of the Rockies seem to come much closer than at any other point in their entire extent, thus avoiding the vast barren table-lands that afflict the country farther south. As to fuel, the coal fields of Montana have been sufficiently explored to demonstrate a practically limitless supply, and at various places good coking coal has been found. Up to the present time nearly all the enormous metal value has been the product of the dry ores of gold, silver and copper. It is now beginning to be realized that the refractory gold ores, or gold sulphates, are limitless in their tonnage. The actual wealth in these ores cannot be estimated."



The first of November, 1860, found my cousins, Ted and George, and myself in camp in a deserted logging shanty in the pine woods of Northwestern Wisconsin. My uncle's house stood on the bank of the river we were trapping upon, and we had paddled up stream in our pine canoe, camping wherever night found us, and trapping the little creeks that put into the river on either side, until at the end of three weeks we found ourselves quite sixty miles from home. Ted, who was seventeen, two years older than George and I, thought we had better not go any farther, and as the weather was getting quite cold, we agreed to start down the river for home as soon as we had trapped the streams and ponds within easy reach of this camp. But when we woke up on the morning of the day we had set for our departure and found the ground covered with two or three inches of snow, the temptation to make use of such a fine tracking snow was more than we could resist, and we all started out for a deer hunt as soon as we swallowed our breakfast. The woods abounded in game in those days, and when we rolled into our blankets that night we had the quarters of two fat bucks hanging up in trees close to the shanty, and everything in readiness for an early start home in the morning.

It turned bitter cold that night, and we awoke at daybreak to find the river frozen over from bank to bank. Chopping through the ice with our hatchet, we found it all of two inches thick. We had not expected winter to set in so early, but knew that there was small chance that the ice would thaw out before spring. The situation was anything but a pleasant one. Our canoe, for which we paid an Indian six dollars, was a fine one of its kind, large and light, and we hated to leave it behind. Nor could we carry half our things should we do so and start home on foot.

Ted was the pluckiest boy I ever knew, as full of resources as he was of indomitable courage, and at once hit upon the plan of mounting the canoe on sleds and pushing it along the ice. During the forenoon we made two rough sleds and fastened one under each end of the canoe. The ice was so smooth that rough boards made as good runners as we needed, and—a great piece of luck for us—while ransacking the shanty for nails to fasten them together, we found a pair of old skates under one of the bunks. Ted made a rawhide rope of deer-skin and fastened it to the bow to pull by, and found an old file with which he put the skates in the best possible order.

After a hearty dinner Ted put on the skates, threw the rope over his shoulder, and with a loud cheer we started down the river, George and I running alongside and holding on to the canoe to keep from slipping. The ice was smooth as glass and Ted found his load so light that he soon shouted to us to jump aboard. We piled in, and when once under full headway fairly spun along, though the canoe "sloughed" badly whenever Ted made a turn. We had a light hatchet with a handle over three feet long, for convenience in hauling traps out of deep water, and to remedy this sloughing I held the hatchet over the stern and let the sharp blade cut into the ice for a rudder. This worked nicely, and we made the woods echo with songs and laughter as we glided between rows of tall pines that lined both shores. Each of us took a turn at the skates during the afternoon and when the sun went down we had covered nearly twenty-five miles. All were in

high spirits at the prospect of getting home in good shape with our canoe and its cargo of furs, pelts and venison, and as the moon shone brightly almost as soon as the sun dropped out of sight, we determined to reach another logging camp about ten miles further below before stopping for the night. I was skating when this plan was decided upon, and after going a few miles further, stopped to allow Ted to strap on the skates for the last pull.

It was his second turn at the rope, but he had rested for several hours, and declared, as he strapped the skates on his feet, that he felt as fresh as ever. I saw by the way he struck out that he meant to show us what skates were made for, though neither George or I suspected the real cause of his rapid pace. Ted was tall for his age, broad-shouldered, deep chested and the acknowledged champion in all the athletic sports of our neighborhood. He was a magnificent skater, and the force he put into every stroke threw up a spray of powdered ice and sent us ahead with a bound. Faster and faster we went, until the speed and consequent vibration made the old canoe hum from stem to stern. George and I supposed of course it was all in sport, and gave a cheer that sent the echoes dancing through the forest. Quick as a flash Ted whirled around with the words, "Better keep still, boys!" then sped on again.

We needed no second warning. We were always quick to heed Ted's advice, and this time there was something in his tone and manner that told us far more than his words.

"What is the matter, I wonder?" whispered George, for we knew Ted had scented danger of some kind. Before I could reply, and seemingly in answer to our cheer, the echoes of which had scarcely died away, far off to the right sounded that fitful, piercing howl that we knew too well could come only from the throat of a timber-wolf. I shall never forget the sensation I felt when I heard that cry. I had the utmost confidence in Ted. I had seen his courage and hardihood tested a dozen times, and many a hazardous scrape had he brought us out of in safety. But what defense could we three boys make against a band of famished wolves, miles away as we were from any habitation or place of refuge?

"Wolves! wolves!" I screamed. "Did you hear that, Ted?"

"Yes," he answered, turning his head without checking his speed; "I heard the first one while I was strapping on the skates, and you and George were tumbling about in the canoe. But don't get scared; have your guns ready and keep cool and we'll make the camp all right yet."

George and I grasped our guns, both double-barreled shot-guns, which, as the result of our deer hunt the day before, were heavily loaded with buckshot.

Soon another faint howl came from the woods to our left, then one from the rear came nearer, and before we had gone a mile their savage yelps and howls rang out on all sides, and we caught glimpses of a dozen or more gaunt forms darting along between the trees on either bank. Not a sound came from the canoe save the hum of the sled runners, and the steady zip, zip of Ted's skates as they cut the hard ice. We were going like the wind, when, as Ted rounded a sharp bend, the canoe sloughed and went broadside for several rods. We held our breath until she righted again, for the least obstruction, a chip or piece of frozen bark in the surface of the ice, would have been sufficient to upset us, and a spill at that moment meant almost certain death to all.

"For mercy's sake, Bart!" Ted shouted back at me, "don't let that happen again! Lay your gun across your lap and keep that hatchet hard on the ice!"

Manning the helm again, I held the canoe straight in the middle of the river, which was

not wide, and the few rods of smooth ice between us and the shore seemed a frail bulwark against the hungry, yelping pack that swarmed along each bank. It kept them back for a while, however, and our hopes rose as we noticed their reluctance to trust themselves upon the slippery surface. Bend after bend we rounded, and although the ravenous pack kept fully abreast of us, not one had yet ventured upon the ice.

"It's so smooth they're afraid to try it!" I shouted encouragingly to Ted.

"Twon't stop them long, though," he replied; "they're only waiting for a good chance to close in on us. Keep her straight in the middle, Bart; and, George, you be ready to knock over the first one that takes to the ice!"

I expected every moment to see Ted give out. It seemed impossible that he could drag that heavy load much longer at the rate we were going; but instead of slackening his pace he put fresh strength into every stroke and we flew along faster than ever.

The wolves were growing more savage and impatient every moment. We could see their white teeth and hear them click as they snapped their jaws together. They were getting ready for a rush, and Ted knew it and shouted back: "Throw out a quarter of venison, quick, and give 'em both barrels when they pile onto it!"

George dropped the meat over the side, and the next moment the whole pack was sprawling upon the ice fighting for a taste of the dainty morsel. Such a wrangling, snarling mass I never saw before or since; and when George sent two charges of buckshot into the thickest of them, the uproar was appalling. Quite a number must have been hit, and as the rest of the pack stopped to tear their wounded mates to pieces and devour them along with the venison, the time gained enabled us to get a good distance ahead of them.

"Load your gun again, George, as quick as you can!" shouted Ted, "and be ready to give 'em more meat and another dose of buckshot! It worked well that time, and a few more such spurts will bring us to the camp."

We knew our respite was only temporary, and that the pack would be after us again in a hurry. But every moment placed us nearer that old log shanty and safety, and our hopes went up with a bound at the success of Ted's expedient.

We had swung round a bend out of sight of the wolves, and George stood up to ram the charges down his gun.

To keep them from being tramped upon in the canoe, we had placed all of our powder-horns, shot-pouches and cap-boxes in an old game-bag, and to facilitate his loading George laid this on top of a pile of furs and blankets in front of him. He was so excited he could hardly pour out the powder. He got it down the barrels at last, however, and was about to pour the buckshot in on top of it, when I shouted to him to first ram wads on top of the powder. He was no doubt confused by the awkwardness of the blunder he was about to make, and when the wolves came tearing around the bend just as he reached down for the pouch of buckshot, his nerves were so upset that he dropped his ramrod. Without stopping to consider the consequences, he made a dive for the ramrod as it fell, giving the canoe a jolt that sent the game-bag with all our ammunition over the side. He would have been overboard after it the next instant, if I had not caught him just as he was about to spring.

This accident completely unnerved me for a moment. I might easily have caught the bag as it fell, but was looking back at the wolves and did not see it until too late. Ted, who was looking over his shoulder, saw it all, and the twitching muscles of his swarthy face told plainly what that loss meant to us.

"Hand him yours, Bart!" was all he said as he dashed the perspiration from his brow, set his

square jaws together, and, like the hero that he was, nerved himself for the struggle which now, more than ever, depended upon his own strength and endurance, and which we well knew meant life or death to us all.

The wolves soon caught up with us, and this time, with appetites whetted by the taste of blood, came flying along the bank with such a rush that Ted saw the slippery ice would not check them for a moment, and ordered George to throw over a quarter of meat before they were fairly abreast of us. George's aim was bad this time, neither barrel seeming to do any execution. The bait served to check them only for a brief instant, when the wolves clambered up the banks and came howling after us again.

Piece after piece of meat thrown overboard enabled us to keep ahead of them, but Ted's strength was either failing him or he was holding it in reserve for a final spurt. I noticed that he eyed the landmarks anxiously as we passed them, and when the last quarter of venison went over the side, my last hope would have gone with it had he not at that moment turned to us with a shout of joy. "We're almost there, boys!" he sung out. "There's the pond just ahead of us!"

Sure enough, the wind had kept the middle of the wide pond from freezing over, and we were shooting straight for the open water as fast as Ted could push us along, with the howling pack so close that when we struck the water with a great splash, the foremost ones were not ten feet behind.

Ted jumped aboard at the last moment. "Grab your paddles, boys," he shouted; "and the minute they tumble in, back water as fast as you can and let me get at them with the hatchet! I'll risk their getting aboard!"

My! but what a scrambling and sprawling there was among those wolves when they saw the canoe and their own leaders dive into the water. They had been so intent upon catching us that they had not seen the danger ahead until right at the water's edge. Bracing their legs apart they dug their sharp claws into the ice and whined like so many whipped puppies. But their speed was too great, the ice too smooth, and in less time than it takes to tell it, every one of them was floundering about in the icy water.

We did as Ted told us and backed the canoe right in among them. I never saw a fellow so wild with delight as Ted was for the next five

later. We were sorry enough to lose all that fine venison, but thought the ten dollars we received for the wolf pelts made things just about even, and considered ourselves extremely lucky to get out of the scrape alive.

HOW FARIBAULT WAS SAVED.

A Chapter of Early Minnesota History in Rhyme.

When judgment from all warp is freed—

A saving witness though forgot—

The savor of kindly deed

Shall many a sinful record blot;

And ere Time's ebb has joined the flow

That to eternity shall swell,

The love, in deeds, to men we show

Oft recompense us here as well.

The warrior chief with all his band

With painted savagery once met,

Where Shattuck's shady groves now stand,

And Shattuck's noble halls are set,

Lending a fairy grace to crown

The bluff that skirts the winding stream,

That ambles through the busy town

Whose future weal is still a dream.

They met in council for debate

To seal in blood the white man's doom,

And every tongue was barbed with hate,

And dark each brow as midnight gloom,

Before the morrow's sunset glow

Should redden o'er the Western plain,

Each pale-face should be stricken low,

And not a remnant should remain.

The Indian war-whoop rent the air

That ne'er to be forgotten yell—

Meet rival to a soul's despair,

Low wallowing in the depths of hell,

And every cheek was blanched with fear,

And every tongue with terror dumb;

O, God of helplessness drawn near,

No succor save through Thee can come.

With noiseless tread the scouts all night

Guarded all egress from the town;

The pale moon oft withdrew her light,

And pitying stars looked sadly down;

Not one of all that wretched band

The church's sheltering shade that sought,

To bloodless lips could hope command—

Words perished in incipient thought.

Fort Snelling was their only hope,

And that was many miles away;

Could it be roused they then might cope

With all the savage Sioux array.

Little they dreamed the mighty King

Of Sabaoth had heard their cry,

And least expected aid would bring

To prostrate heathen deviltry.

Once Death had nearly claimed a brave,

By all his tribe deserted, then

Had white man come his wounds to lave,

And nurse him back to life again.

Swift Eagle, though in council dumb,

Resolved to rescue or to die;

When friendly shades of night had come,

Northward to Snelling he would hie.

With serpent stealthfulness and speed

Beyond the outmost guard he crept,

Then swifter than the fleetest steed

Outward like hurricane he swept.

He reached the Post ere easterly glow

Had caused the world's great heart to beat,

And thus it was that Faribault

New Ulm's sad tale did not repeat.

HARVEY KAY COLEMAN.

Faribault, Minn.

THE NORTH STAR.

Oh, stationary guard of earth and sky,

Look not so coldly on this troubled earth.

'Tis but sometimes weak man doth pass thee by

Unheeding thy most awe-inspiring worth.

Thy light we know means life to storm-tossed men

Upon Old Ocean's trackless waste of waves.—

Enshroud thyself? Ah, heaven help us then,

Think of the wailing wives, the wat'ry graves!

But "constancy" thy motto e'er must be—

Seafaring men delight to praise thy worth,

Thy never failing twinkle, cold and free,

Above this transient thing we call the earth.

Teach us the lesson thou so well doth know;

Teach us the spirit of the Northern Star.

With faith, a steadier purpose, true though slow,

Man will be satisfied and happier far.

FRANK C. TECK.

Whatcom, Wash.



"WE WERE SHOOTING STRAIGHT FOR THE OPEN WATER."

The log shanty stood on the bank, at a point where the river spread out to six times its usual width, forming a large pond, across the lower end of which a log boom was stretched for the convenience of lumbermen.

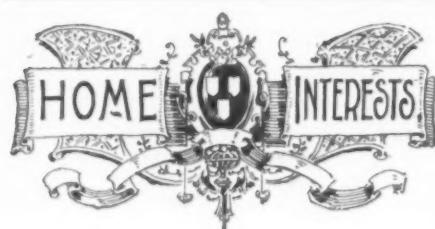
This announcement brought a cheer from George and me. We were by no means sure of our safety, however. Ted was throwing all of his strength into a last effort, and every stroke of his skates shot the canoe ahead with a jerk. But the last bait had scarcely checked the wolves at all, and as the stream widened and they saw us receding from them, the whole pack left the banks and made a dash across the ice straight for the canoe. My heart almost stopped beating as I saw them coming. The shanty stood at the lower end of the pond, and the savage beasts would be upon us before we could possibly reach it. Just then Ted checked his speed and allowed the canoe to shoot past him. Throwing the rope into the canoe, he caught hold of the stern, and snatching the hatchet out of my hands told me to climb into the bow.

"Look ahead, boys!" he shouted. "The middle of the pond is all open; we'll run 'em into the water and drown half the pack!"

minutes. Joy at our own escape, and a chance to wreak vengeance on our cowardly pursuers made him almost crazy for the time. Standing upon his knees in the stern he swung that long-handled hatchet as though it was no heavier than a cane. Nearly every blow either cracked the skull or broke the back of a wolf. Of course they scattered in all directions, but we shot the canoe here and there after them, and before they could clamber out upon the ice and sneak off to the woods, Ted had disabled at least a dozen of them.

With much difficulty we got the canoe on the ice again and reached the cabin, where we passed the night in safety. Ted could hardly get out of bed the next morning, but forgot all about being stiff and sore when George, who had been out exploring the pond, came in to inform us that five dead wolves were lodged against the boom. We spent that day in taking the pelts off the wolves, and in getting ready for a fresh start the next morning. Our game bag we found torn to shreds, while the powder-horns and shot-pouches were bitten full of holes and scattered in every direction.

We did not attempt to travel by moonlight after that, and reached home safely two days



A Vulgar Expression.

A critical parographer has this to say in the *Detroit Free Press*: "Thanks" is a miserable expression, commonly used by persons who have not had the advantages of good breeding. Every favor received and civility shown deserves to be recognized, and the smallest acknowledgment the recipient can make is to say or write "Thank you." The vulgarity of "thanks" is on a par with the postal-card correspondence.

The Bicycle Age.

It seems to us that the age of the bicycle will be an age of improvement in a great many directions. The bicycle has not yet become a perfect machine, its cost is altogether too high, but it will not be very long before better wheels are made and more reasonable prices prevail. It will not always be necessary for the rider to bow himself up as he propels the machine, nor to pay fancy prices for his wheel. Invention is very busy on all lines relating to bicycles, and in a very short time comfortable and healthful machines will be made for the multitude.—*World's Progress*.

Dialect Literature.

The dialect of the magazines is generally the worst possible misspelling, with very little approach to the pronunciation which it is supposed to indicate. Apparently the hardest thing for a writer to learn is that dialect is not bad spelling. Half the Irish dialect, so called, seen in the magazines is a libel on the Irish pronunciation, while, if possible, the negrodialect is even worse. The trouble is that the writers have, as a rule, picked up their dialect from other writers, and know nothing of the genuine article. If they would go to nature there would be a marked improvement in this respect.—*St. Louis Globe-Democrat*.

A Marriage Contract Not Valid.

A Minnesota jury has refused to recognize the validity of a contract specifying a matrimonial match as a consideration for the payment of money. A man in this State agreed to give another man \$25 if he would secure him a wife. When the wife had been obtained the Benedict repudiated his contract and the matchmaker brought action against him. The matchmaker was defeated. A man whose courtship entailed no greater investment than \$25 would ordinarily be accounted a favorite of fortune. On the other hand, a jury that has the temerity to declare a good spouse to be worth less than her weight in gold is evidence prima facie of twelve men hopelessly gone wrong.

The Origin of Ice Cream.

The man who invented ice cream was a negro by the name of Jackson, and in the early part of the present century kept a small confectionery store. Cold custards, which were cooled after being made by setting them on a cake of ice, were very fashionable; and Jackson conceived the idea of freezing them, which he did by placing the ingredients in a tin bucket and completely covering it with ice. Each bucket contained a quart and was sold for a \$1. It immediately became popular, and the inventor soon enlarged his store, and when he died left a considerable fortune. A good many tried to follow his example and ice cream was hawked about the streets, being

wheeled along very much as the hokey pokey carts are now, but none of them succeeded in obtaining the flavor that Jackson had in his product.—*Baker's Helper*.

Brown Bread the Best.

People use the white flour of commerce because they are born into the idea that it must be white to look nice. There is no physiology which bases the qualities of food upon a white color. Color is a sentiment. Food to be food must contain all the elements of the tissues the body feeds upon. It does not say the body must be white. This preference for white flour comes altogether from habit and false education, for those who eat bread and other food made from whole-wheat flour soon begin to love it, and in a short time experience a natural craving for it which white bread does not and cannot satisfy, and the light brown color of the bread, with its rich wheat flavor, is a constant reminder that the life and sustenance are not driven out of it, while its satisfying and nourishing qualities attest that it is the perfection of hale and healthful food.—*Baker's Helper*.

The Unsociable.

We envy neither the man nor the woman who cannot speak to a fellow creature out of their own circle or to anybody without the formality of an introduction. There is no computing the amount of profit as well as pleasure such persons lose by hedging themselves in with this stupid fence of fastidiousness. We have always found more of this feeling among persons who were more touchy on their social position than among those self-respecting persons who thought nothing about it. A great deal of intelligence is floating around the world without being labeled, and those men and women who have the good sense to recognize this fact and act upon it, not only are educating themselves, but conferring that pleasure which we are all bound by the common ties of humanity to exchange with one another. It seems to us that it is only the snob and pretender who takes a different view of this question.—*Philadelphia Times*.

Fashions in Girls' Names.

The most important change in the naming of girls has been the growing disinclination to give them more than one name, the object of this being that when a woman marries she may easily combine her full maiden name with her new surname, writes Mrs. Hamilton Mott in the *Ladies' Home Journal*. A three-word signature is much prettier and more convenient than one composed of four words. Then, too, immediate recognition of her own, as well as that of her husband's surname, and the convenience in genealogical research and legal transactions, are two reasons of sufficient importance to warrant the combination were there no others.

With this fashion in girls' names has come, as in boys, a disinclination to use diminutives or pet names. Mollies, Maggies, Katie and the various feminine "ies" and "ys" are as scarce as their masculine counterparts Jimmie and Willie. Mary, Margaret and Katherine have taken the place of the former, and James and William of the latter.

About Tea and Coffee.

Do you like a cup of good coffee? And again, how often do you get one? The most frequently called for brand of coffee at the grocer's is Java, but a good second place is held by Mocha. A wholesale grocer, in conversation with a New York *Mail and Express* man the other day, spoke of this demand and disclosed a few facts which are not generally known by the coffee-drinking public.

"People are continually calling at the grocer's for Mocha," he said, "and many will take no other.

As a matter of fact there are probably not five hundred people in the United States who have ever tasted real Mocha, and I do not believe that there is a single pound of it to be found between the Atlantic and Pacific. The Arabs, of Arabia, not those of Africa, are the most fastidious coffee-drinkers in the world, and the crop of Mocha is not large. The governors and sheiks get the pick, the finest and plumpest berries being chosen for them. The rich Arabs get the second choice. The rest is sold throughout the country, and a very little, consisting of the shriveled and broken berries, finds its way to Constantinople. Not a hundred-weight a year gets west of that city." What is called Mocha consists of inferior Arabian growth; at least, a little of it does.

Americans never see the best tea. The finest growth never leaves China, and the best of the export goes overland to Russia, being known as "caravan tea." Some of this retails as high as \$50 a pound. True caravan tea is never brought to this country, as it is believed that a sea voyage effects its flavor. Some of the Ceylon tea ranks as high as the best Chinese growth. A pound of what is known as "golden tip," grown on a famous estate in Ceylon, was recently sold in London for \$135.

Indian Songs.

Alice C. Fletcher, in the January *Century*: In every tribe there are hundreds of original songs which are its heritage. Many of them have been handed down through generations, and embody not only the feeling of the composer, but record some past event or experience; they are treasured by the people, and care is taken to transmit them accurately. People who possess written music have some mechanical devise by which a tone may be uniformly produced, as by the vibrations of a chord of given length and tension, the tone becoming the standard by which all others can be regulated; and a succession of tones can be recorded and accurately repeated at long intervals of time, and by different persons. The Indians have no mechanism for determining a pitch; there is no uniform key for a song; it can be started on any note suitable to the singer's voice. This absence of a standard to the pitch, and the Indians' management of the voice, which is similar in singing and in speaking, make the Indian music seem to be out of tune to our ears, conventionally trained as they are to distinguish between the singing and the speaking tone of voice. Although the Indians have no fixed pitch, yet, given a starting note, graduated intervals are observed. Not that any Indian can sing a scale, but he repeats his songs without any material variation. Men with good voices take pride in accuracy of singing, and often have in their memories several hundred songs, including many from the tribes with the members of which they have exchanged visits.

The barytone voice among men and the mezzo-soprano voice among women, are more common than the pure tenor, bass, contralto, or soprano. As a rule the Indian voice is reedy and steady in tone, and sometimes quite melodious in quality; but the habit of singing in the open air to the accompaniment of percussion instruments tends to strain the voice and injure its sweetness. There is little attempt at expression by piano or forte passages, or by swelling the tone on a given note; but as the songs generally descend on the scale, there is a natural tendency to less volume at the close than at the beginning or middle part of the tune.

Where several take part in the singing, it is always in unison. The different qualities of male and female voices bring out harmonic effects, which are enhanced by the women's custom of singing in a high, reedy falsetto, an octave above the male voices. The choral generally presents

two or three octaves, and one becomes conscious of overtones. Evidently the Indians enjoy this latent harmony, as they have devices to intensify it. They employ a kind of throbbing of the voice on a prolonged note, producing an effect similar to that obtained in vibrating a string on the 'cello by passing over it the bow in an undulating movement. In solos like the love-song, where there are sustained passages, the singer waves his hand slowly to and from his mouth to break the flow of the breath and to produce vibrations which seem to satisfy his ear.

Memory of Previous Existence.

"I have a number of friends who have shadowy recollections of a previous existence upon this earth," said a theosophist to a writer for the *Pittsburgh Dispatch*. "You doubtless have also had experience when an indefinable, vague re-

later he removed to Dakota, where he still resides. About three years after his daughter's death he was blessed with another little girl, who was christened Nellie, it being the favorite name of his wife. When the little one became old enough to talk she persisted in calling herself Maria. She became quite angry when told her name was Nellie. She said the name belonged to her, as her parents used to call her Maria. A matter of business took Mr. Fulton back to Effingham County and for company he took Nellie along. The father was surprised at the intuitive knowledge the girl had of the place. She not only recognized the old home but many people she had never seen, whom the first daughter had been acquainted with. About a mile from the home was a school house, where Maria had gone to school. Little Nellie had never seen the place, yet she gave an accurate

though we should not, just at present, wish to follow his example. His supply of electric force was taken from the service wires in his city, and as he used the current for other purposes, separate wires were laid for each kind of service, in order that the expense of each could be determined; but it appears, nevertheless, that where there is a supply taken into the house for any purpose, it may without embarrassment furnish current for all branches of utility.

The gentleman in question used for his experimentation the furnace plant already in his house. But its mission was much modified. From the cold-air box ran a main pipe, in which was placed what may be called the central electric heater. From this main pipe smaller pipes, in about the usual manner, radiated to carry the air to the several apartments. In each of these pipes a secondary heater was placed. The method em-



FISHING FOR SALMON TROUT ON LAKE PEND D'OREILLE, IDAHO.

membrance of something or somebody came to you which puzzled you and made you say, 'I'm sure I've seen that before.' Yet you may know positively that, as far as this present existence is concerned, it was impossible for you to have received even an idea of the place or person. I have often met people with whom I became intimate at first sight. It seems, as I have often told them, that I had known them for years. It was only the other evening that I met a lady from San Francisco whose face had been in my mind for years. As soon as we met there seemed to be something that drew us together. We were as old friends. The most remarkable instance I ever heard is that of the daughter of Isaac Fulton. Twelve years ago he resided in Effingham County, Illinois. While there he buried a daughter named Maria, who was taken away just as she was budding into womanhood. About a year

description of it to her father and expressed a strong desire to visit it. Accordingly her father took her out to the school house. As soon as she was inside she marched straight up to the desk her sister had occupied and said: 'This is mine.' In telling the story Mr. Fulton said that it seemed as if the dead had come back from the grave, but her mother would not have it so. She says if that is true she had but one child, and God gave her two."

Electricity for House Warming.

A correspondent of *Good Housekeeping* writes that it has been successfully demonstrated that electricity may be used to warm the house, dispensing entirely with fires. A full report was recently published of the manner in which a Brooklyn man had solved this problem, a synopsis of which will not be without interest, even

ployed was, primarily, to use the central heater for slightly warming the current of air as it entered. In mild weather this was found to be all that was necessary, and the apartments were kept remarkably comfortable—the more so as the air was not burned or dried, and had no impregnation of gas or other deleterious element. When the temperature was lower, as many of the secondary heaters as might be required were turned on, and in this manner severe weather was robbed of its terrors. Yet as a further guard against emergencies, special heaters were placed in all portions of the house. These were simply electric radiators of a peculiar form, and when they were placed, with the proper wires and switches, all the work of caring for them was done. When their services were demanded, the switch was turned; when no longer needed, it was shut off.



A Diversified Citizen.

Dawson boasts of the prize citizen of many callings in the person of J. J. Gokey, who, besides his occupation as a dry goods, hardware and grocery merchant, combines that of dentist, harness and shoemaker, gunsmith, photographer, justice of the peace, and yet finds time to do considerable farming and is also an ardent sportsman.—*Fargo Argus*.

"Bigger as God."

Last month the State Land Commissioner was hearing a contest at Olympia for the possession of some natural oyster beds. "Sandy," one of the oldest of the Siwash tribe and one of the dirtiest, was on the stand. In the course of his testimony he said: "Long years ago Indian own all the fish, all the clam, all the oyster—God give 'um. Few year ago Boston man come along; he tink he own all the fish, all the clam, all the oyster; he (measuring about an inch on his finger) so much bigger as God." Those on the sober tribunal were forced to laugh heartily.

Tame Swans as Storm Signals.

A farmer on Sauvie's Island, in the lower Columbia, has three swans which he captured a year or two ago. They are quite tame, and he allows them to run at large in a field near the house. A sportsman who spent a few days with the farmer recently, enjoying duck hunting, was astonished on going home one evening to hear the farmer's wife say, "It is going to storm; the swans have been flying south all day." He remarked that he had been out all day and had not seen a swan flying in any direction. "Oh! I mean our swans," was the reply. It was then explained that when the weather was going to be fine and spring-like, the three swans in the field went to the north end and fluttered their wings, trying to get away toward the Arctic regions, and when a storm was approaching they did the same thing at the south end of the field.—*Review*.

Wild Hogs in Washington.

According to the *Olympian-Tribune* there is terror among the people living on Mud Bay Point, caused by the roaming through that country of a drove of wild hogs. There are one or two dozen of the beasts. They have been breeding there for about seven years, becoming wilder all the time, but not until the last two months have they made themselves dangerous. They are of a large-boned variety, and have grown to an enormous height. They live mostly on the skunk cabbage growing in the swamps, but as this class of provender has run low, they have become further enraged with hunger and are seeking other food. A few days ago they took after a fleet-footed pony and ran him down, killing him almost instantly. The residents of the Point have found it necessary to keep their stock within doors. Occasionally, however, an animal has become loose and lost its life by the attacks of the boars. Nobody in the neighborhood dares go out after night, and extreme caution is exercised when out doors during daylight.

Early Days in Montana.

Among the old records in the county clerk's office at Missoula are many curiosities, and some of the old declarations of occupancy made before

the land was surveyed in the Missoula and Bitter Root valleys are quite entertaining.

One of the queerest documents recorded is a deed from Mary Craft to Tyler Woodward, in which for a consideration of \$150 she transfers to "said party of the second part all my title and interest in a house and lots situated at Missoula mills in said county and Territory, the said house being the one in which Matt Craft was killed on the 22nd day of December, 1865, and now in my possession."

On August 1, 1866, David Paltee deeded to Frank L. Worden and C. P. Higgins the "flowing mill and machinery" which now stands near the end of the bridge and in the rear of the First National Bank.

Another declaration gives "David Thompson's lower stake" as a corner. Occasionally a rude map accompanies the old record, but not often. J. W. Groom describes the property which he claims as the land "known as the farm on which I have been doing work."—*Anaconda Standard*.

A Rocky Mountain Glacier.

Did you ever hear of the great glacier near the summit of the Rocky Mountains, not many miles south of the Canadian line? Well, there is one there, and so far as is known no human being has been able to reach it. For several years different parties have tried to get up to it, but they have invariably given up the project after no end of mountain climbing. A representative of *Forest and Stream*, with a reliable guide, has made the attempt three or four seasons when camping in that section of the mountain range, and though an experienced Alpine climber, has had to abandon the idea. This great glacier, said to rival the Alps in size, is on a spur of mountains branching from the main range on the west side of the summit and is thought to lie about thirty miles north of McDonald's Lake. Those who have seen it from the summit of an adjacent peak say it is one vast ice field about twenty miles square, covering the tops and sides of an immense mountain. It appears to be 300 or 400 feet in thickness and is cracked and wrinkled in a wavelike manner. As it partially melts in the summer the water rushes down the precipitous sides of the mountain in gigantic cataracts several hundred feet at a leap and at the bottom forms the source of two or three distinct rivers. A party of Englishmen who saw the glacier last summer through a field glass pronounce it greater than any field of ice they had ever seen in the Alps. They had been trying every conceivable way to even reach the base of the huge mountain which supports this mammoth blanket of ice, but it was no use, they could not do it. So they had to content themselves with looking at it from a distance of fifteen miles by the aid of a powerful field glass.

George Treat, ex-city marshal of Great Falls, has quite a record as a hunter and an all around mountain climber, but he confessed to a *Tribune* reporter that trying to climb that big glacier was too much for him. He was hunting in that wild, remote section last summer with a party of Iowa and Montana people and some of them made several ineffectual efforts to get somewhere near to the glacier. He says one time they were three or four days from camp and had no end of narrow escapes climbing the almost perpendicular mountains. That was the time he killed some Rocky Mountain sheep and goats, for which an agent of the Smithsonian Institute offered him a good sum. The second day out, while on the peak of a mountain just at daybreak, they saw something glistening way to the west of them. As the sun came up and its rays struck the object they were looking at, they realized it was the great glacier of which they had often heard, but never before seen. As the rays of the rising sun became brighter the glacier appeared to come near them

until they imagined it was at their very feet. Without the aid of a glass they could see it easily, even the great creases or chasms scattered all over it. Some of these huge cracks looked to be several hundred feet in width and no one could tell how deep. As the atmosphere became warmer a mist arose from the glacier which gradually hid it from view and left the party standing spell-bound and unmindful of the fact that they were nearly exhausted from hunger and fatigue.—*Great Falls (Mont.) Tribune*.

The Two New Utopias.

Among the queer developments of these adamantine times in Oregon and Washington is a threatening reversal of the course of the empire's star. Popular discontent, parent of emigration, has brought forth a couple of projects whose common aim is partial depopulation of this city. With that aim, however, their similitude ends, as one of them seeks to land its followers in far-off Africa, while the other one proposes to plant its devotees in the northeastern part of this State. Neither of them was born in Portland, but both have been advocated here and received with favor by the people who are most keenly feeling the prosperity-crushing effects of the "change" inaugurated with the present national administration.

Spokane is the birthplace of the movement to establish a Utopia in this State. About two months ago a co-operative union was organized by the idle tradesmen of that city, their object being to find a means by which they could help each other. The result has been the establishment of a co-operative colony on the farm of A. E. Jewett, an elderly philanthropist residing in Eastern Oregon. He is the owner of a fine farm of 340 acres lying along the banks of the Columbia, with ten acres of vineyard, forty acres of nursery ground, and a fine bearing orchard covering twenty-five acres or more. This entire farm, with all its buildings and improvements, Mr. Jewett promises to give to the colony. Forty families, it is said, can easily be supported on this land, and fifteen or twenty Spokane men have already signed the required agreement and will go the farm about the end of this month to begin working on the co-operative plan. The conditions of admission to the colony are simple but inflexible. The applicant must possess good health, industrious habits, strict morality, a peaceable disposition, a good reputation for honesty and fair dealing, and \$100 in cash. He must also promise to conform to the rules of the society as adopted by the majority. A Spokane paper says that the direction of all work on the farm is to be intrusted to a board of directors elected by the colonists. All the men in the colony agree to work at any thing, as these may direct. Next month some will be set to plowing, others to clearing woodland, and a third band will put up the sawmill and begin cutting lumber for the new houses that must be built. Each man will have his own home, built to order, ready to receive his family when mid-summer comes. By next spring the work is to be perfectly systematized. All will work under the directors' orders and all receive equal pay. Each man will be paid in coupon orders on the community store, where he can buy whatever he wants at wholesale prices. Such goods as the colonists cannot make will be bought in Spokane or Portland, at wholesale rates, with the money obtained from the sale of surplus fruits and other products. The profits go to the common treasury.

To Astoria belongs the emigration scheme which has the dark continent for an objective point. Several young men of that town have formed a small colony to locate in what is now supposed to be the new El Dorado, in the Transvaal, South Africa. This country is said to have a balmy climate and immense natural resources,

although thus far only gold-mining, agricultural and cattle-breeding industries have been extensively nurtured. The city of Johannesburg, with a population of 50,000 accumulated in half a dozen years, is the center of supplies for an immense range of country. The route from here is to New York City, to Southampton, to Cape Town, thence by rail 1,000 miles to Johannesburg. Last year the gold yield of the republic amounted to \$30,000,000. The mining is done by negroes, who work for almost nothing, but there is money to be made by men of means. As men of means in this country can afford to wait for the finish of these piping Democratic times, and as men without means cannot very easily raise \$1,000 apiece to purchase transportation to the African land of promise, Oregon is not likely to contribute very heavily to Johannesburg's increase of population this year.—*Oregonian*.

Stories of Old Stagers.

The smoking room of the Pullman sleeper is a great place for story telling, writes a contributor

which, without saying a word or indicating that he heard the surprised comments of the passengers, he put on his gloves and smoked in silence. He had kept the team in the road and under perfect control all the time. The garrulous man told no more stories of that kind.

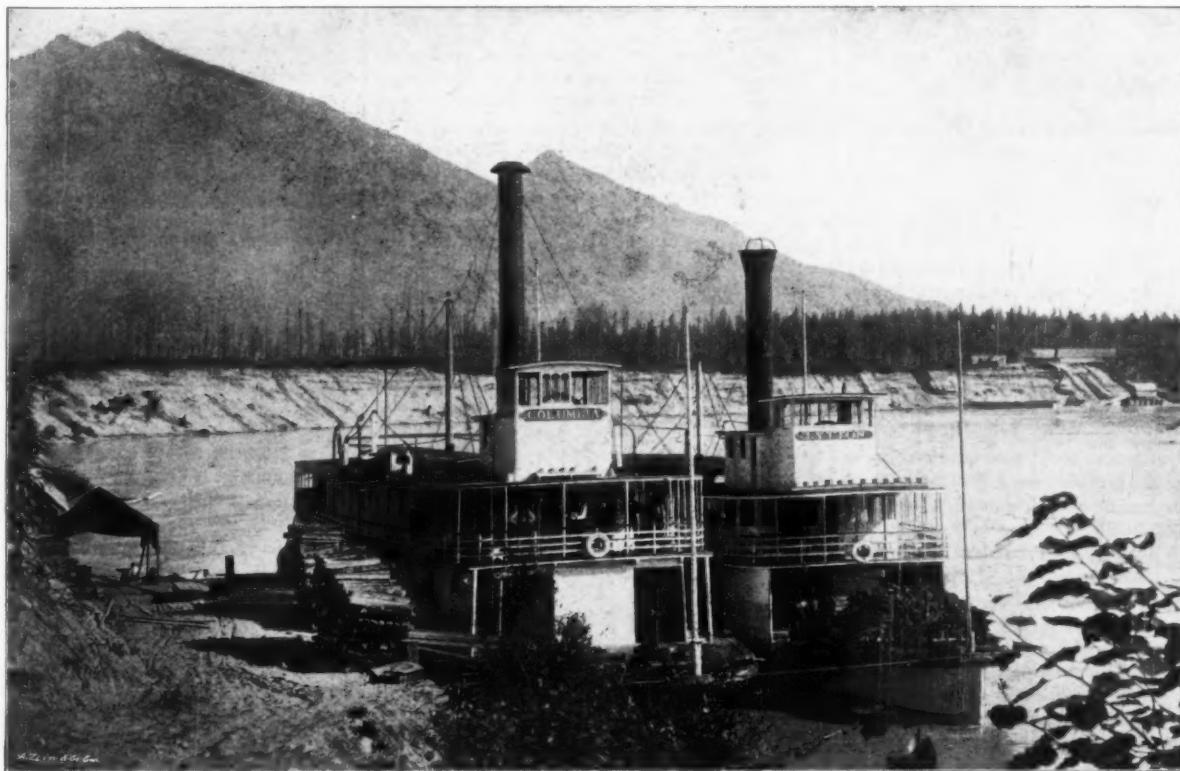
But the driver's blood was up, as was evidenced later on, when he overtook a teamster in the road who had ignored the usual signal of the coach at a curve and had driven past a meeting point, so that there was not room for the coach to get by him. He was so heavily loaded that he could not drive fast and the coach could not be delayed. The driver watched his chance and when he saw the wagon get to the outer edge of the road to avoid a rock, he touched his leaders with the whip, galloped alongside and passed the wagon, but dexterously swung his wheelers in so as to catch the whiffle-tree in the harness of the other man's team. The result was that the harness was stripped from the horse as though made of thread, and the U. S. mail whirled by on the run, leaving the smart freighter to swear and repair

did not overhaul the tramp for several miles. Gilmer took him on again, and at each station, for about sixty miles, made him go through the same performance, to the great amusement of the upper deck passengers."

Nobody loved a joke better than Gilmer, and he played them on rich and poor alike. On one of his Western trips, Mr. Salisbury left his Union Pacific pass at home. He struck the road at Ogden, on his return, and Gilmer accompanied him East. Shortly after starting, the conductor called for tickets and, after a long search through his pockets, Salisbury announced that he had left his pass at home, but gave the number, stated who he was and asked the conductor to let him go through.

"I hear that story almost every trip now," said the conductor. "You may be Mr. Salisbury and carry a pass, but you will have to produce it or pay your fare on this train."

Salisbury pulled out a handful of other passes, some letters and other documents, but the conductor would not look at them. He said it was



ON THE UPPER COLUMBIA RIVER, BRITISH COLUMBIA—STEAMBOAT AT A WOOD YARD.

to the Portland *Railway and Marine Gazette*. I have traveled many thousand miles in these cosy compartments and I believe the first trip I ever made on which there were no "off-color" stories told there, was quite recently, with Hon. Zera Snow, of Portland, in the role of chief story teller. Mr. Snow began with some very entertaining reminiscences of the old days of staging in the mountains of the West. He said that at one time he started out on a mountain ride in Eastern Oregon with a driver who seemed very surly and had very little to say. A fellow passenger on the upper deck soon regaled the crowd with a recital of the feats of an expert driver who did all sorts of things while driving six horses rapidly over bad roads. As the conversation flagged, Snow noticed the driver pulling off his gloves. The day was very cold and stormy, the road was very muddy and rough, being through timber and rocks, and the six horses were unruly bronchos. The driver produced tobacco, paper and matches, rolled a cigarette and lighted it with the first match he struck, after

the damage at his leisure. And still the surly stage-driver had not uttered a word, except to his horses.

"The old staging firm of Gilmer & Salisbury," said Mr. Snow, "was composed of Monroe Salisbury, who spent most of his time in Washington City, looking after star route and other mail contracts, and Jack Gilmer, a veteran driver, and one who had few equals and no superiors in handling the ribbons. Whenever Gilmer went over the line he would do most of the driving. On one of his periodical trips, and when he was handling the ribbons, a tramp asked him for a ride. Gilmer stopped and bade the fellow to get up beside him. He told him that they were close to a station and that, as the company was very strict about drivers carrying deadheads, it would be necessary for the tramp to get off about half a mile from the station, run ahead and, keeping out of sight of the station, approach the coach on the other side, when he would be taken up again. The tramp jumped off and ran away like a deer. The stage stopped at that station for dinner and

easy to get up documents of identification, but they were not good for passage on his train. Finally Salisbury told him to ask Mr. Gilmer who he was, and as the conductor was well acquainted with Jack, he said that if he would identify Salisbury as his stage partner it would be all right. About this time Gilmer, who had heard enough to know what was going on, was very deeply interested in a friend's story. Salisbury went to him and Jack scowled at the interruption, said he had never met him before, and advised him to pay his fare or get off. Salisbury could not believe his ears, and begged Jack to make it right with the conductor, but Gilmer was obdurate, and the conductor reached for the bell-rope. The train came to a standstill, and just as the disgusted Salisbury had closed arrangements with the conductor to carry him to Green River for cash and let him telegraph from there for a pass, Gilmer relented, and, after satisfying the conductor that it was all a joke, ordered wine, at his partner's expense, for the occupants of the car.

AS IT HAPPENED.

BY JOHN CRYDERMAN.



was not a good model for a Sunday school superintendent, though he did lead the choir in the one held in the Banner school house. So no one wondered at nor blamed the Widow Young, when, after twice warning him not to

come home with Maggie, nor to have anything to do with her, she met him at the gate, when he came with Maggie, and smote him hip and thigh, or thereabouts, with a piece of weather-boarding.

That was the last time he ever went home with Maggie. He was too sore to gather corn the next day, and when he went to the literary and the paper (that vehicle of country literariness where the choice spirit who is elected for a month at a time vents his spleen and cheap wit on all who are luckless enough to fall under his displeasure) was read. It was rather hard to take all the jokes about "not suffering from cold, as he had been weather-boarded for the winter," and that the widow thought he tried to be "too Young," and so on.

It hurt to hear the laughter and low comment, while Maggie sat with her mother only a few seats away, and Joe Green sitting by them, who laughed loud and long at his rival's discomfiture, and even the widow smiled grimly at remembrance of her prowess and Frank's retreat. Then to have Joe walk away with them when literary was over was even worse. Then at the next dance, when it was "ladies' choice," and Maggie chose Joe, it brought on a quarrel that is remembered at Rainbow yet.

When the next week the dance came off on Painterhood, where Frank was to have taken Maggie, and instead took Mattie Dorr, while Maggie went with Joe, both knew the breach was eternal and this world was a "wilderness of woe." As for Joe, he saw his golden opportunity and woed and won.

Did Maggie ever say she loved him? Joe never told, nor did Maggie, and who else knows? At least she promised to marry him, and what more could you want?

That was no land of long engagements; one proposed on Sunday and it was a slow youth who was not out for his license and the minister on Monday. So they were married and went to live with the widow.

It was the week after that the Overmeyers gave their dance, and in the crowd of course were Maggie, Joe and Frank. How did Maggie and Frank make up? Heaven—or the other place—only knows, but I must confess I was sorry for them, even though Maggie had been a fool to marry the wrong man and Frank was a scamp on a small and rather mean scale.

Their grief was real enough. Joe found them in a corner, where they were soaking the same handkerchief with their tears and singing the same dismal chorus of woe, the burden of which was, "Why did you marry him?" and the response of "Oh, I don't know why I did." Why some one had not fallen over them before is a mystery, but no one had till Joe did. Then there was a scene.

It was a rule of etiquette, not by any means to be broken, that there should be no rows at Overmeyer's.

Bill Overmeyer had sworn that he would throw the first offender not out of, but through the door, and Bill was a good, husky man, and doors were expensive.

Joe was a rash man and would have chanced the throwing then and there, but Frank—well, whatever vices he had, neither courage nor fer-

city was of them. So he left so hurriedly in fact that he forgot to take his hat, overcoat or girl.

What Joe said to Maggie going home is known only to them and the recording angel, but among ourselves, if the angel got down all the profanity Joe used when he was mad, he—or she—must have used a phonograph, and then it would have had to stand out doors till the smell of brimstone wore off; anyway, next day they moved over to old Peter Green's, Joe's father. Old Peter was an elder in Israel—an "elder as was an elder." I could write a book about his odd ways—but I will not. He was mighty quick on trigger, and if anyone was hunting for trouble he could always find some ready-made to order at the old man's. Not that he was quarrelsome, for he was not; but you did not want to crowd him too closely, nor, as he would say, "browse over him much."

Where and how Frank and Maggie met, who can tell; but meet they did somehow, somewhere, and they planned an elopement. Not one of the common ordinary elopements, where the couple simply sneak away, but an ornate, lurid, wild West sort of an elopement of the most approved style, where Frank was to play Lochinvar and lead Joe, and carry off Maggie in triumph.

Nor do I know how Joe found it out, but he did. You learn things in strange ways on the plains; so he invited two of his friends to come up and see the elopers off. Frank had enlisted four of his friends to go along and see the procession start, and on the appointed evening they started up to old man Green's, resplendent in finery, with big six-shooters swung on their belts—that was before the days of cartridge guns—and every one carried the good, old-fashioned loose ammunition revolvers.

Frank's notable scheme was to ride up and carry away behind him Maggie and her best clothes. Think of a love-lorn youth who was practical enough to have his elopess carry off all her best clothes. It showed a good, thrifty, commercial spirit. The same, in fact, that made him buy five thousand dollars worth of goods on credit for the co-operative grange store (of which he was manager) before he stole the whole thing. But to resume this story. He was to take Maggie—and her clothes—and ride away, down into the Cherokee nation, that haven of refuge for better men than Frank.

How Frank came to leave old man Green out of the game, when he could always be counted on coming in with a full hand, is something no one could ever account for, but he left him out—in his calculations.

In the evening the two friends came up for supper, as they sometimes did, and as it grew dark they sat back in the room well out of sight, while the women folks were getting supper.

Maggie was too nervous to be of much use, but no one seemed to notice it. It may have been she was growing doubtful of what she was going to do. Conscience! Oh, no. Not at all. It's left out of some people. Many people regret its possession. Some regret without cause, for it's more often cowardice than conscience that ails one.

At last Frank and his friends rode up, and then Maggie understood what the friends were there for. They calmly reached down into their boot tops, and out came those trusted friends, the good old Colts, but they said not a word. The old man moved his chair over nearer the corner where sat the old family shotgun, and had any one dropped the ramrod down the barrels he would have found a four-inch load, but outside of these movements no one would have known anything out of the common was expected to happen. Frank and his crowd rode up to the door and dismounted. Two stayed with the horses and two came in with Frank. Frank came in in what he thought true frontier style, with his revolver in his hand and waving it over his head. Now that shows how silly a man gets when he is love, more

especially when in love with another man's wife.

He called to Maggie to get her things and come on, and Maggie started into the room to get them. Just then old Mrs. Green lighted the lamp. It was a small lamp, but an electric search light would not have made more of a sensation.

Could you have seen it, it would have been a wonderful and edifying sight. Old man Green covered Frank with the family shotgun, and each of the friends had one of Frank's men covered. When Maggie came in with her bundles as per program, that was the tableau that confronted her.

There were the usual remarks about the disposition of hands, and Frank dropped his gun and his hands took the same position that they assume now when he dismisses a congregation. In fact some ungodly men are cruel enough to say that there is where he learned that graceful motion now so much admired by his hearers. His friends, not to be outdone in an act of graceful courtesy, put up their hands at the same time and in the same way.

You ask why Frank didn't shoot when he had a gun in his hands? Did I ever tell you how old man Harold was held up? Well, that will explain Frank's movements.

The old man was a mixed-blood—Cherokee, negro and white. Clean grit, no one ever knew him to back down or take water on anything. So when it was known that the old man had been held up and robbed even of his gun, everyone was surprised; and when a friend met him and asked how it happened he gave a clear and forcible explanation. Type can never give the way it was told, but here goes as near as I can give it:

"Yo' see it wus dis yer way: I dun ben late er gittin' erway frim town dat day, an' it pear ter git da's sorter quick lak, an' wen I git down by Bill Smith's plais I dun tink, 'Dis yer's a moughty good plais ter git hol' up in,' an' re'ch back an' pull my gun roun' in front er me, an' jes den er man step out in de ro'd wev er scatter gun (shotgun) an' I look at dat gun an' see dat bote ba'ris dun been roostered (cocked) on me an' dat mistah man he do'n need ter say er wu'd. Fer fo' Gord my han's jist dun gone ovah my haid er demse'vs."

Now do you understand why Frank put up his hands? If you don't you were never on the plains and so of course nothing would be clear to you. Besides, as I said before, Frank was not ferociously inclined.

Where was Joe all this time? He had gone out to invite in Frank's other two men, and he now came in with them, though as the door was rather low and their hands were in the same graceful position, there was some trouble about their coming in.

Old Mrs. Green and the children were standing back out of the way, and Maggie was crying like she was scared. Then followed a short sermon from old man Green on the sin of trying to steal your neighbor's wife, which he compared to trying to steal his best horse, and what worse could he say of a man than that? All of which showed how great the old man considered the offense. Then he ordered Frank to kneel and say his prayers. Frank did the kneeling promptly and the praying, too, though he must have mistaken old man Green for the Deity, as he addressed all his prayers to him. He promised he would never speak to Maggie again, and she quit saying, as she had been (in a scared way, I must admit) "Don't shoot him." He swore he would never even look at her again, and she quit crying. It must be rather hard on a woman to see her chosen lover down on his knees howling and begging for his life, and that was what Maggie had to stand. And when Frank offered to leave the country and never come back, I'm sorry to say that Maggie so far lost her Christian spirit as to audibly wish the old man *would* shoot him!

Frank's friends expected to be shot, but they

never said a word, until one of them asked the old man to "shoot the cowardly blankity blank and stop his howling."

Maggie left the room, and Joe, leaving his men to the friends, followed her. The old man was about ready to shoot, when Mrs. Green vigorously informed him that "there was to be no blood spilt on her clean floor she had just scrubbed, and that she had just cleaned house, and she wasn't going to have to go over it again. If there was any killing done, it must be out of the house and away from the yard." Now that was reasonable enough, but here arose a difficulty. There was no lantern, and a lamp would blow out in the wind. To try and march five men out to be shot and expect them to walk peacefully along in the dark, was too much for human nature. The trouble was settled in an unexpected way. Joe came back and proposed to turn the crowd loose.

How he and Maggie settled it, I don't know. This is no attempt to work out motives, but simply a sketch of real nature and real facts; but settle in some way they did.

The old man came near dropping the family shotgun in the extremity of his grief and amazement. At first he would not hear of it. It was as bad as to turn loose a horse thief. A direct flying in the face of Providence. Something he, for one, would never do. The friends and old Mrs. Green backed Joe up. Frank's friends volunteered the information that there would be no more trouble from them. They had had all they wanted and so on. Atlast the old man gave in. He had the satisfaction of kicking Frank out of the house and yard, which somewhat soothed his grief and sense of undeserved injury.

Half an hour later he, with Joe and the two friends, sat down to the supper Mrs. Green had prepared. As they sat down Maggie came in from the room where Joe had left her. Her eyes were red and swollen and she was very quiet. She took the coffee-pot and poured the coffee and passed the biscuit. Then she stood behind Joe's chair with both hands resting on his back and gazed down on him with a look of pride and respect through eyes still wet with tears.

A BOON TO SETTLERS.

Almost equal to the opening of a reservation is the decision of the Northern Pacific Railroad Company to open twenty-two townships in Eastern Washington to settlement, says the *Spokane Review*. This land is all located in Stevens County, which joins Spokane on the north, and means a world of good for that part of the State. The land placed on the market constitutes the railroad grant in twenty-two townships, a portion of it bordering on the Colville Indian Reservation. "We have figured," said L. C. Dillman, "that there are over 1,500 farms in the townships placed on the market, one or two of the townships not containing the full eighteen sections, owing to the breaks caused by the reservation and the forty-mile limit. The full import of this cannot be understood until one stops to think that this great tract of land includes about 250,000 acres."

It is not all agricultural land, as any one at all acquainted with Stevens County knows, but there are great forests of yellow and black pine, fir, tamarack and other woods. Some of these lands are good only for timber, while others will make excellent farms after the forests are removed. The land has not been valued as high as might have been expected, the prices ranging from \$1.50 to \$8 and \$9 an acre, the average being about \$3.50 to \$5 an acre. The whole section is well watered, and many a new settler will find his way into the Colville Valley this year.

THE MAGIC OF A SONG.

BY J. W. VAN DEVENTER.



HERE was little gayety among the passengers of the west-bound stage when it pulled out from Jacob's Wells one day in July, 1865. The day before, the east-bound stage had been robbed near the summit of the range between the Wells and Diamond Springs, and it was feared the west-bound stage would be held up at the same point.

The passengers were a heterogeneous collection of humanity. Two of them were miners, one was a gambler, three were California ranchmen, another was a young girl—just passing through her eighteenth summer. The intelligence that a brother was sick unto death on the banks of the Yuba in California, had brought her from a quiet home in New York over the seemingly endless "Overland Route" across the parched deserts of Nevada, until she had almost reached the borders of the land of gold, and now, fresh, pure, in all the grandeur of her unspotted womanhood, she formed one of the motley crowd that filled the coach.

It was difficult to analyze and classify the last passenger on the list. He was a young man, apparently twenty-four or twenty-five years old, tall, slender and stately, wearing a suit of black, extremely clerical in cut, and a shiny, tall "plug" hat. A long, tight-fitting black overcoat covered him from chin to knee. When the stage left the station he wrapped himself in his thoughts, taking no part in the conversation and caring nothing for the remarks his appearance elicited from his fellow-passengers.

Slowly the rickety old vehicle climbed the eastern slopes. Perhaps a mile from the top it stopped for a moment on a level spot of ground to allow the horses to gather their energies for a grand dash that would, it was hoped, carry the stage in safety by the hold-up it was feared awaited it on the summit.

The passengers all sprang out, as soon as the halt was made, to rest their cramped limbs by walking around the little plateau. On the right it was bounded by a chasm that some mighty throe of nature had opened deep into the heart of the mountain. It was perhaps fifty feet feet wide, and on the other side towered up an immense, heart-shaped rock, curiously cleft through the center.

"That," said the driver, with a wave of his hand toward the mighty granite mass, "is the Rock of Ages."

The black-robed passenger stepped to the edge of the yawning gulf that intervened and scanned the rock as closely as possible. A mountain vine had climbed over it and almost at the bottom of it had spread out a cluster of five leaves that looked not unlike the digits of a human hand, save for the color.

While he was standing gazing, the young lady drew near him, murmuring to herself,

"Rock of Ages, cleft for me."

Suddenly he lifted his hat with his left hand, unbuttoning his overcoat with his right, and, turning a smooth, boyish face toward the coach, requested those who knew it to join in singing the hymn which had given name to the red, towering mass beyond him. The next moment he began in a rich baritone—

"Rock of Ages, cleft for me,
Let me hide myself in Thee;
Let the water and the blood—"

Here the girl, in a soprano as clear and ringing as the notes of some forest bird, took up the melody,

"From Thy riven side which flowed,
Be of sin the double cure,
Save me, Lord, and make me pure."

Their voices blended perfectly, and the flood of melody rolled on, echoing and re-echoing from rock, chasm and mountain side, till all creation seemed full of it.

And they had listeners they did not dream of. Just beyond the coach half a dozen large rocks formed a sort of wall and concealed three men, the outlaws whose attack was expected on the summit a mile away.

They had calculated on the coach stopping where it did and concealed themselves behind the rocks to inspect its passengers, that they might be better prepared for the hold-up.

When the first notes of the grand old hymn swept over them, a sneer played over the features of the leader for an instant, then, as the girl took up the strain, his face took on a look of interest and even pleasure.

"Not the labor of my hands
Can fulfill Thy law's demands."

They were singing the second verse now. Clear and pure and heavenly it rose on the mountain air and cast a strange spell over that bandit chief. The bare, rocky Sierras faded away and the pine-clad Alleghenies came before his vision. He saw a humble cottage; he saw a gentle, fair-haired woman lulling a boy of five or six summers to sleep with the beautiful notes of that hymn. He saw a sweet-faced sister going about the room at her work and joining her voice to her mother's, and he thought the voices of angels in heaven could not be sweeter.

"While I draw this fleeting breath,
When mine eyes shall close in death,
When I soar to worlds unknown—"

They were singing the last verse now and he was sobbing quietly as he thought how that dear mother and sister had soared to worlds unknown, leaving him utterly alone in this heartless, unfeeling one.

"Rock of Ages, cleft for me,
Let me hide myself in Thee."

They were finishing now and the strain seemed to linger as though the very rocks were unwilling to part with them and were trying to retain them.

"Note that cluster of five leaves on that rock over there," said the young man as he placed his hat on his head. Then he suddenly unbuttoned his long, black, ministerial coat, and, with a motion as quick as lightning drew two "44s" from a belt it concealed. Six shots rang out faster than you could count them. The five leaves had each hole near the center, while the last shot cut half in two the stem on which they grew. "Just a little practice, to keep me in trim for the road agents if they appear," he remarked as he rapidly inserted fresh cartridges in the empty chambers.

The robber chief had watched the singing and shooting through a cleft in the rock behind which he lay. As quick as it ceased he drew a field-glass from his pocket, wiped his tear-dimmed eyes and looked at the target a moment. Then he spoke: "Boys, I've not heard that old hymn since Mother sang it over my cradle in childhood, and it has completely unnerved me. We won't hold up this stage."

Then, almost in a whisper, he added: "I'm durned if that preacher-looking cuss don't take the cake for an all-round man."

BELIEF IN A GREAT SPIRIT.—The Western Indian's belief in a Great Spirit is written over the map of the Northwest. Manitoba is one record, and Lakes Michigan and Huron have many names that commemorate the piety or superstition of the Indians. A considerable space in the northern part of Lake Michigan is called Manitou, and here are North and South Manitou islands.



A North Dakota Idyl.

A Dakota editor's "Peerless" stove
Was growing cold while in vain he strove
To kindle the flame (but, instead, his ire),
Vigorously poking his lignite fire.

His office was full of lignite smoke;
And the desk on which the editor wrote,
As well as his hat, his coat and his shirt,
Were covered alike with lignite dirt.

He could dimly see, through the smoke and dust,
That his type was pl, and a broken bust
Of the beautiful girl who, long ago,
Had stolen his heart in New Mexico.

He thought not of honor, so great was his wrath,
Of the glittering gold ahead in his path;
Nor even the comfort and joy of the soul
That is shared by the use of this native coal.

In desperation the editor's brain
Began whirling around as though insane;
Then, grabbing his devil, threw him out,
While neighbors ran, asking, What's all this about?

Pat Lyons that moment looked in the door,
As the editor raved and almost swore;
Then jokingly said as he heartily laughed:
"When I build a fire I open the draft!"

—H. A. Stickney in *Steele Ozone*.

Jack's Question.

A lady was visiting in a house full of boys, and said to her hostess: "What a pity, Ethel, one of them is not a girl." Master Jack sniffed derisively: "I'd like to know which un'd a been 'er? Bob wouldn't a been 'er; Jim wouldn't a been 'er, and I wouldn't a been 'er. Who'd a been 'er?"—*Athena (Or.) Press*.

Their Abiding Faith.

Said the governor of Oregon to the governor of Colorado: "Friend Waite, what do you think of the streets of the New Jerusalem being paved with gold? As for me, I kick." Said the governor of Colorado to the governor of Oregon: "Friend Syly, unless at least the side streets are paved with silver, I won't go. Keep up the kicking."—*Hood River Glacier*.

Gallantly Acknowledged.

A Glenwood lady has kindly stated that "we are the biggest liar who ever stepped into shoe leather." We are under obligations to the lady for the compliment, although we are sorry to take the laurels from one of our citizens, who has held that honor for several months. We think an editor with such a reputation ought to be a rattling success. Again we thank the lady for the compliment.—*Glenwood (Minn.) News*.

His Perceptive Powers.

During a recent trial at the court house one of the witnesses was repeatedly called "judge." When the opposing counsel came to cross-examine him he asked:

"The counsel for the opposite side has several times called you a judge. What are you a judge of?"

Quick as a flash came the reply: "I'm judge of a fool when I see one."—*Minneapolis Tribune*.

Domestic War.

A widow with six children and a widower with ten were recently married in this city. That makes just the kind of a family for a family reunion. We are reminded of the story of a similar family where there were children on the maternal and paternal sides and some in common.

One day the children got into a rumpus among themselves and the old lady was heard screaming, "Husband, your children and my children are fighting with our children."—*Red Wing Republican*.

Plenty of Air in Chicago.

"I would like to ask if red apples are not the best—it is said they possess the most oxygen," said an old rancher at the Spokane fruit convention.

"My friend," said Mr. Barnett, "the Chicago buyer does not care to buy oxygen; he wants apples." And the convention cheered.—*Spokane Review*.

He Celebrated.

One day last week, at Kennebunkport (a sea-shore resort near Boston), Benjamin Thompson woke up and found himself alive and 100 years old. Such an event doesn't occur to a man more than once in a century and Ben thought he would celebrate it and have some fun. So he "stumped" his youngest son, a youth of 71, to "rattle." They had it "nip and tuck" and the "young feller" was much surprised to find himself down and the old man on top at the end of the first and only round. There is nothing better than salt water, salt air with a sprinkling of New England rum, to keep a man healthy, frisky and strong.—*Minneapolis Journal*.

An Otter Tail County Snap.

When a man makes a fortunate deal he is happy. It matters not whether he is engaged in business that is safe or whether he indulges in games of chance or buys tickets in the Louisiana or matrimonial lottery. And when a man is happy he wants others to rejoice with him. And this is what led Clerk of Court Hanson to tell a *Journal* reporter the following:

A German, a bachelor, about fifty years old, came into the office with a broad smile on his face and asked for a marriage license. After the paper was made out, the German took out his pocket book to pay for it, and when the amount was named the happy man exclaimed:

"Zwei tollar und a half; mein grashious, but dot was sheep!"

"I was surprised," said the clerk, "for some fellows will grumble at paying the legal price of a document, even of this nature, but I said nothing."

"Yah, mynher, dot was sheep: for zwei tollar und a half I gets me ein frau—"

"Yes."

"Und fem shildrens—"

"Yes."

"Ein goot home—"

"Yes."

"All dese tings for zwei tollar und a half; mein grashious, but dot was sheep."

The amused clerk, as the old man turned to go, extended the usual congratulations, and wished him a long life in which to enjoy the possessions he was soon to acquire.—*Fergus Falls Journal*.

Sweet as New Mown Hay.

Every thing in or around the *New Idea* office is on the sick list except our cumbersome and antiquated old George Washington hand press and it would get on its ear and cut a fantastical dido or blow up—if we did not watch it like a midnight assassin. We crave the indulgence of our army of staunch friends and big hearted patrons and if they will please excuse us for being sick—we will promise to fairly tear the bone out of all creation when we get well or ruin as pretty a pair of store teeth as ever a dentist put into the mouth of a toothless old rooster. We also implore the forgiveness of our paid-up subscribers and eager readers. Their pink veil of charity

thrown over our indisposition—will be as sweet to us—as new mown hay. Our affection for the people of the whole world assays sixteen ounces to the pound and with us it is a case of roseate health or death and we do not care a durn which way fate decrees it.—*Red Lodge (Mont.) New Idea*.

A Great Indicator.

A solicitor for a Minneapolis newspaper was in Grafton last week working up trade and giving away weather indicators. These indicators are a peculiar piece of workmanship; they are one size smaller than a silver dollar and cost less; a number of little dots about as big as the head of a pin form a circle on the indicator. They are very sensitive to any of the advances of the weather and turn all colors when exposed. When your subscription is due a small dot in the middle turns blue; but after you pay it, it works in harmony with its associates. To ascertain the kind of weather that is on the road, place the indicator on the window sill for five minutes and the spots will turn the colors indicating storms, sociables, fair weather, picnics, elections, fires, dog fights, joy, sorrow, and approach of a bill collector. The postmaster got one and gave it a trial. He put it on a window sill according to directions and went to look at it in five minutes. It was gone—it worked perfectly; it had indicated theft. Shortly after the postmaster lost his, I saw the man the next door with one. When he sets it out he goes out and watches it with his dog. That indicates suspicion. It is a great indicator.—*Record*.

The Girls Went First.

The editor of the *Steele, N. D., Ozone* thus describes some of the things that he saw while out with a coasting party:

The slope was on the southwest side, and storms which lately blew had spread the snow upon that hill in a manner fair to view. The surface was, apparently, as firm and safe to tread as one could ask for agile feet, or gently gliding sled. Now, having picked a likely place, with view to longest slide, the question rose, which one should take the initiatory ride. The ladies were prevailed upon to claim their usual right, while self-denying gents stood by to watch the merry sight.

Four sleds set out with great eclat, each striving to be first, and in a moment none could say which had behaved the worst. For there upon that hillside white, spread out in great array, the sleds and their late occupants in great confusion lay. Here one with runners wrong side up disported to the moon, and there its rider dug the snow from out her over-woolen. Here one was slewed around and stood with rakish nose in air, and she who erst had guided it was scarcely anywhere. A third continued right side up 'bout half-way down the hill—its owner stopped some distance down—a most artistic spill. A fourth went through the treacherous crust, and over it you know head first that rider went beneath the woolly snow.

Perhaps you think the gentlemen who gave the girls their start suppressed their true emotions with most consummate art. But had you heard the comments of said ladies at that time, I think you'd have agreed they would not quite adjust in rhyme.

However, after sundry smiles had burst upon the air, the escorts flew to rescue the much dismounted fair. From out the muss of sleds and feet and muffs and hoods and things, they extricated several girls (they hadn't any wings.) With head deep buried in the snow one fair one said 'twas mean for any one to coolly go and plan for such a scene. Another said she knew quite well the men expected this or they would not have been so keen the trial trip to miss.

But smoothly spoke the gallants then, and

calmed the rising storm, by telling those fair maidens how well they did perform. In fact, they vowed, they were surprised at the naivete and grace with which a lady coaster could so swiftly change her place, or fly through rods of snow bank with effort scarce a trace. And the exact precision which those feminines displayed in arriving at their landing place was elegant indeed—and equalled only by the flights which fancy stars had made.

Cora and Chaska.

When Cora Belle Fellows was wedded to Chaska and came with her dusky liege lord to Nebraska the skies seemed bedecked with a constant aurora and the little log hut seemed a palace to Cora. Months passed and a cloud grew above the horizon in the form of a squaw, and those women are "pizen." Her eyes were as dark as the dismal hereafter and her hair was as straight as a two-by-six rafter. The stout heart of Chaska succumbed to her graces, for an Indian knows what an elegant face is; and they met when the moon the calm atmosphere mellows, nor cared for the heartache of Cora Belle Fellows.

One night when the storm king the coal scuttle looted, this Chaska put on his red blanket and scooted away to the North with this maiden, nor tarried till he and the fair Minnekadinctum were married. And Cora she waited and bore his abuses and hoped he'd return to his wife and papoose, but weeks rolled by till the looks of her cubbard reminded her sorely of Old Mother Hubbard. Then Cora, disheartened, disgusted and gaunted, deserted the home that her Chaska once haunted, and mingled once more with her friends, broken-hearted, and Cora and Chaska forever are parted.

A moral this tale bears to girls who, through folly, or strange love of romance, imagine it jolly to cast their sad lot with the sons of the wild-wood and seek a divorce from the friends of their childhood. The romance is short, as in the case related, for Cora now knows she was sadly misnamed, and has, with the rest, the unhappy reflection of duty to half-breeds that need her protection. The question of Indian civilization involves not the horrors of mixed procreation. An Indian has to be dead to be decent, which fact has been known a long time—is not recent—and history shows, from the best observations, that half-breeds are worse than their tribal relations.

I weep for poor Cora and both her papoose; I shudder to think what a gosling, a goose she is; I feel indignation that Chaska should leave her and skip with another and basely deceive her, and think that the law should receive a few patches to shut off these semi-barbarian matches.

—Nebraska State Journal.

Press Woodruff Writes From Kaslo.

The ostensible object of my visit to British Columbia is as follows: First, to look up a new system of self-adjusting confidence and panic restorative. Second, to make a study of the British language. Third, to lecture on the two sides of life, viz: inside and outside. Fourth, to wake up a few natives who felt a little drowsy, went to sleep in the year of 1889 and left an order with the night-watch (who has since died) to be called five years hence.

Before I descend I will give some idea of the resources of this country. Kaslo is situated; the fact is, there never was a town this side of the line but what was more or less situated, as well as slightly far-famed and picturesque. Demolished silver pig-lead and black-strap tobacco are the principal products. Just outside the city limits may be seen large deposits of peacock scrap-iron and basaltic rock showing traces of plaster-paris. There is also a game played here which might be called a resource; the name of

it is sluff. I put in an hour or so watching a party of gentlemen play it, during which time they frogged very often. Three of them hung to it till they croaked. The cigars on this side cannot be called a resource. I smoked one on my arrival here (also on the landlord of my hotel) and turned stone-blind for ten minutes. As near as I could tell, this brand of cigars had been soaked in asphaltum and dried in bond.

Real estate is higher here than in any other part of British Columbia; some of it ranging as high as eight thousand feet above the sea level. To the word painter the Selkirk Mountains are bewitchingly tempting and irresistibly inviting. When the warm glow of spring takes a three months' shift, and the scintillation of the sinking sun seeks a flirtation with the loftiest peak whose bosom holds a treasure of fifty-nine-cent silver and a chest protector against free lead, then, I say, come West, word painter, come West! There is also a field for the pathetic writer whose dream is to give a panic-stricken nation a hypodermic injection of sad wails and bring tears to the eyes of a people that has a contract to do nothing else but wail till the price of bar silver advances. Come West, pathetic writer, come West and get shot on sight.

The second day here I was arrested, charged with carrying a concealed pistol. When I was properly arraigned before the magistrate he asked if I was guilty. I told him I was. "Well, what was your object in having a gun on your clothes; and what did you aim to shoot?" he said. I told him "Nothing, unless it might be craps." The fine was \$5 extra for trying to be funny in court. After I was released he asked me what I styled my lecture. I said "Wit and humor," of course.

"What do you take for it?"

"For wit I take the stage; for humor, I take hive syrup, and if you will come out to hear me and keep down violent demonstrations, I will pass you in free."

He was there, and experienced no trouble in keeping the audience quiet. After the show was over, he asked me how I managed to hold my audience so well. I told him it was simple enough. In most places I have a man at the door with a

gun. In prohibition towns, I keep a man at the door with a bottle. These two methods will hold most of the audience, and the balance of them will wait till the show is out, thinking that I will say something sooner or later; then they go home wondering who wrote my press notices.

When I return to America, I aim to smuggle over some British jokes which I think will take well in the Palouse and Potlatch countries, as they will be the only dry article seen in that country since the beginning of the damp-wheat panic. The only thing that crosses the line after dark without paying duty in British Columbia is the moon.

As I look the future in the face, and rub up against the hitching post of the past I grow careless and allow my imagination to kick over the trace. While in Nelson a man talked me into buying a package marked "repertoire." He did not tell me what I would get, but said it would prove valuable in my business. When I opened it I saw at a glance that I ought to get ninety days and costs for allowing a man to rope me in so easy. The package contained the following revised adages, which are used a great deal by the Slocan prospectors:

A drowning man will grab at a straw—if there is a milk-punch at the other end of it.

What is meat for one—is horse radish for another.

Still water runs deep—so does a ground hog.

A bird in hand is worth two in the bush—if those two should happen to be buzzards.

Procrastination is the horse-thief of time.

It's a long road that has no bottling works at the end of it.

Absinthe makes the heart grow fonder—Canadian rye has the same effect.

There is no time like the present—since the panic of 1873.

Where it is folly to be full of bliss, a man is out of his head to court wisdom when foolishness is handy.

This may yet be the cause of my selecting a wife at random in self-defense, or doing something else desperate in order to avenge myself for buying stuff unseen.

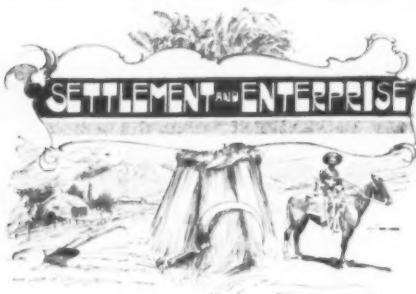
PRESS WOODRUFF.



TRUSTS MUST BE INVESTIGATED.

First Tramp (hanging back)—"Wat's the use goin' in there? Half a dozen bars 've refused us trust already."

Second Tramp—"What the country demands is an investigation of the trusts, and that's what I'm on. So come along."



Come to the Evergreen State.

There is no better time for people in the East thinking about searching for a new location to make up their minds to come to Washington. Get out of your misery and, if you please, into "God's country" before it is too late, and you are old, withered and weakened from hard labor and worry over the mortgage and ten per cent interest note. Come, come to the salubrious State of Washington, where want and famine skulk into their hiding places; where no foul breath poisons the atmosphere; where sighs and sorrows have fled; where mirth holds high carnival, and where the soil is a better gold mine than Africa can boast of.—*Skagit (Wash.) News*.

Diversified Farming in North Dakota.

Wm. Staples, a successful Cass County farmer, in a recent interview says: "I am a great believer in diversified farming. I had 1,200 acres in wheat and 600 more in other grains, and a very moderate amount of swine and other stock, but I made more money this fall off my stock than of my grain. I sold twenty-seven hogs and three head of stock at the farm Monday for \$525, over half of which is profit. I have now 125 head of horses and colts, fifty head of horned cattle and seventy swine, which I consider the best property. Yesterday I sold \$125 worth of chickens for my mother to a Fargo man, nearly all of which is profit."

The Decreasing Public Domain.

It is not well to lose sight of the fact that the people occupying the new lands in the West are "growing up with country." Slow as this growth may seem, it is nevertheless sure. Year by year the public domain is growing smaller and smaller, and when at length it is exhausted, land values will be forced upward just as surely as water in a creek is forced to higher a level when its onward course is stopped by a dam across the stream. The stream of population keeps pouring into this country, and when its onward westward course is stopped we will feel the effects of the backwater in a denser population and great demand for land. The profits from our farms lie not altogether in what we produce on them, but partly in the fact that from the very nature of events the land must increase in value.—*Dakota Farmer*.

Fruit Raising as Life Insurance.

A novel idea was suggested by some of the members of the convention "Did you ever think of the idea of an orchard taking the place of an insurance policy?" said one of the delegates. "Well, now this has been suggested to me a hundred times since I have been in Spokane, and I think it is a capital idea. Now, nearly all business men carry life insurance, and they pay an average of \$100 a year. This paid-up policy proposition is popular because there may be some real benefits while a man lives, but compare this to growing an orchard. Supposing that every man instead of taking out an insurance policy should pay his \$100 or \$200 a year towards an orchard. Every year the money invested would double many times over and within a few years there would be an income. Put this into more orchards and what would you have at the

end of ten years? You would have at least a \$20,000 orchard, with \$5,000 a year net income. Is there any insurance that would leave a man's family in more comfortable circumstances than this? I tell you there is not an insurance company in the world that can give a man a tenth of the benefits that the same amount of money put into an orchard will, and from what I have heard today I think the business men will start in on this idea. There is another proposition which is of great importance to this country. I suppose that Eastern Washington pays \$100,000 a year at least in life insurance premiums, and the majority of it goes East. Now if this were put into orchards every dollar would be kept here. Just think of it."—*Spokane Chronicle*.

Volume of the Yakima.

Most people have an idea that the Yakima River is an insignificant stream, but an article in the January number of the *Irrigation Age* shows it up in a very different light. The following figures give the cubic feet per second of the stream named, one cubic foot per second equaling about fifty inches as commonly measured. In this list the measurement of the Yakima is given as taken in October, 1893, at Union Gap, six miles below North Yakima: Missouri, 3,511; Yakima, 2,662; Yellowstone, 1,650; West Gallatin, 576; Arkansas, 605; Rio Grande, 263; Bear River, (Cal.) 980. This gives the Yakima 133,100 inches as usually calculated, and the fear of an insufficiency of water for irrigation purposes does not seem to be well founded, as the amount required for the Kittitas Valley Irrigation Canal (the "Big Ditch") is 40,000 inches, and the Middle Ditch, as contemplated, 9,600 inches.

Beaver Farms.

It is said that McLeod County, North Dakota, parties have a project on foot to establish beaver farms at several points along the numerous streams that traverse that county. There are several of these ranches in South Dakota, but heretofore the idea had not struck the denizens of the north State. All that is necessary in engaging in the profitable business of beaver raising is to erect a woven wire fence covering several acres of ground on each side of a creek. The "stock" costs comparatively little, and once placed within the inclosure, the beavers need no attention. They build their own dams, and always prepare for winters as though they were not captives. First-class beaver skins are worth at the present time upon the Eastern market about \$12, a good sized skin weighing about three pounds. Beaver are twice as prolific as sheep, and are most intelligent and docile animals. In their wild State they are becoming scarcer every year, and are almost extinct in North Dakota. As they need but little attention, and furnish their own feed, summer and winter, and this climate is peculiarly fitted for their sustenance and propagation, there is no reason why big profits cannot be made from farming them in this State. On any of the streams in the western part of the State a trapper can in a week secure enough of the animals to stock a good sized farm.

The undertaking certainly deserves to be crowned with success. Beaver in North Dakota are growing scarcer year by year, and some scheme such as this one to preserve them for a time, and give them a chance to increase and multiply will be both profitable and beneficial. Lesson might well be taken from the extermination of the buffalo. North Dakota has game laws and fish laws, and yet sufficient thought is not devoted to some specimens of the animal creation which are valuable to mankind, and which are growing scarcer all the time. Beaver farms, if the scheme proves a success, should be encouraged generally.—*Bismarck Tribune*.

The Northwestern Big Bend Country.

TO THE EDITOR: In accordance with your desire, expressed in a late number, that parties knowing of the existence of good Government land should publish the same in THE NORTHWEST MAGAZINE, I send you the following:

In Northern Douglas County, Washington, bounded on the north by the great Columbia River, and on the east by that wonderful freak of nature known as the Grand Coulee, lies a body of rich farming land capable of giving free homesteads of 160 acres each to at least five hundred families. This land is in every way the equal of the celebrated Waterville section which adjoins it on the southwest. Water is easily obtained close to the surface. In fact, it is better watered than the Waterville section.

These lands are in the non-irrigable belt, and are covered by the best growth of bunch-grass in the State. The land is ready for the plow. The reason that these lands have not been taken up before is that there was no market for crops. Waterville, where was the only flour mill in the country, was at least fifty miles southwest; while the nearest railroad station, Coulee City, was equally distant. However, this spring gives this whole section a good market. The new town called Bridgeport, on the Columbia River, will give a fine market for wheat grown by the settlers, as its owners are erecting a large brick flour mill. The country to the north is a vast mining region, so that there is a home market for flour, as well as farm products generally.

I know of no better section in the whole Northwest to go to than this Northwestern Big Bend Country. The climate is very temperate, with rainfall always sufficient to produce the largest crops of wheat, oats, barley, rye and flax, as well as all kinds of vegetables and the hardier fruits. As the whole plateau is surrounded on three sides by great mountain ranges, the scenery is superb. The air is clear and bracing. The warmest days of summer are invariably followed by cool, lovely nights. In mid-winter the thermometer rarely touches zero. There are rarely thunder showers, and these of a very mild order. There are no mosquitoes, and no case of sun-stroke is on record. It is just the place to settle permanently, with every condition favorable to a pleasant and profitable life.

To reach this section take the Northern Pacific Railroad to Spokane. Change there to the Central Washington Railroad to Coulee City. Thence to Bridgeport by stage. In a brief article like this it is impossible to do justice to this great though sparsely settled section. I will gladly answer any inquiries that may be addressed to me. This is one of the few sections left where large colonies can easily find locations in a compact body.

CHAS LITCHFIELD,
Sec'y Merchants' and Mfrs' Assn, Spokane.

Cold and Wind Regarded as Blessings.

Budd Reeve in St. Paul *Globe*: For one, as a relief to tired, weary ears, I wish to praise the State I live in and give thanks for the many opportunities to gain wealth, health and happiness. Life in North Dakota is pure poetry. It is the enjoyment of the highest state of science and civilization. To live on snowy plains, to be wrapped in ice and smile in comfort, through science and the creation of man, is indeed poetical. To sit in isolation and have the news of the world dropped at your door by electricity ahead of the sun is the purest of poetry. It is like living in the clouds and sending your thoughts on missions of business and excursions of pleasure.

Then the long, cold winters; thanks for these. Six months in the year the Creator of the universe stands guard over homes to keep the tramps away. He don't carry a shotgun or club. He puts the thermometer forty degrees below

zero, and the virtuous inhabitant of North Dakota goes to sleep guarded by nature, feeling safe and happy in Divine hands. The state of the atmosphere is a complete protection against tramps. It is true, a little more wood is required as a tax to pay for the presence of a Divine policeman who never sleeps on his beat. The tax is cheap enough. It is worth all it costs, and more, too. Over half the year we are free from toads, bugs, snakes, flies and all insects, human and otherwise. Long, cold winters make this country a success as a pleasure resort. Some people object to the excessive amount of wind in circulation here. That is because they have not analyzed and looked into the future value of wind.

The horse, the ox, electricity, steam and water, are all harnessed and made to serve man as servants, but wind is going to be the king of powers. It is coming forward as a voluntary and universal servant. All that is lacking is machinery for it to work on. It is going to be almost inexpensive. Windmills are put up now for \$125 that grind fifteen bushels of feed per hour, pump all

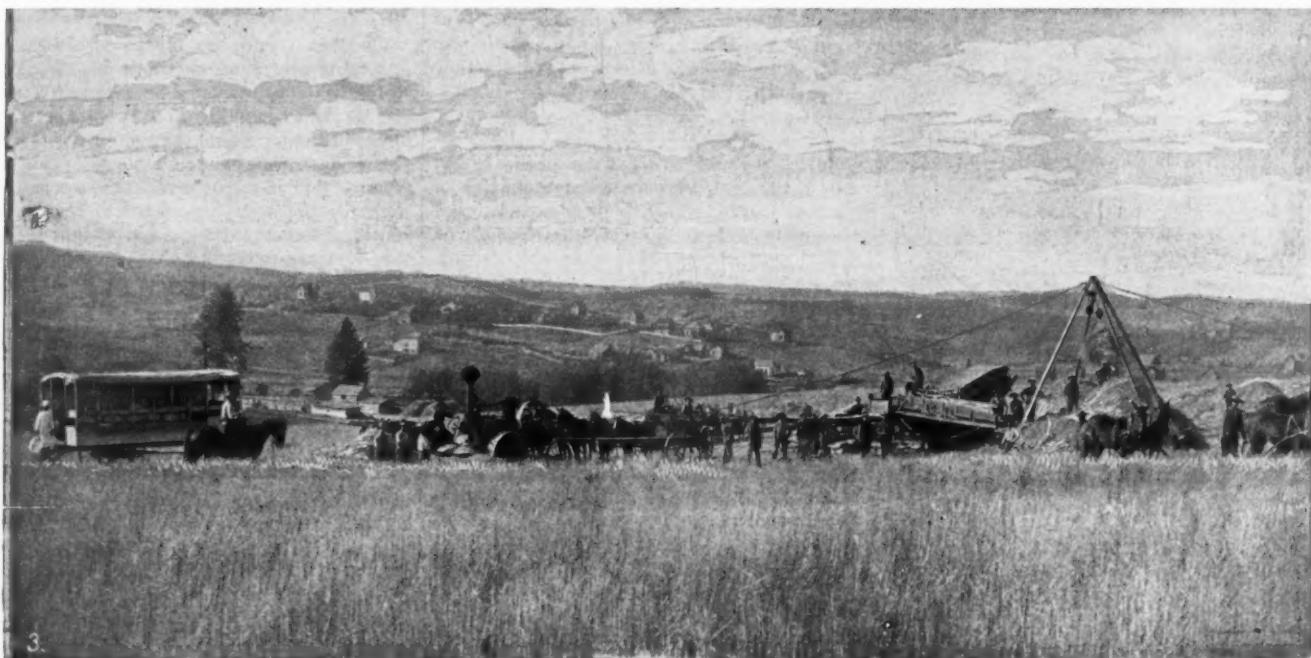
roaring elements harnessed up working for him and making him happy. He will light his barn, and warm his hen roost by electricity. The kerosene lantern must go with other things belonging to the dark ages.

Grays Harbor Tide Lands.

A correspondent of the *Tacoma Ledger* writes: Chehalis County has to a great extent been occupied in the past in developing its timber interests. Except upon the river bottom lands proper, no particular attention has been devoted until very recently to utilizing its agricultural resources, especially the county's vast tide marsh and fresh water cranberry marsh lands. In making a circuit of the lower Chehalie River and Grays Harbor towns, embracing Montesano, Cosmopolis, Aberdeen, Hoquiam and Ocosta, one is greatly impressed with the immense extent of these lands and their almost undeveloped condition. While in Ocosta, in conversation with a little group of gentlemen, I happened to mention this anomalous state of things and inquired its cause.

about twelve miles long and varying from a half to a mile in width, comprising some 5,000 acres. This is natural cranberry marsh and easily improved. It is protected from the ocean lying west of it by the sand dunes thrown up along the beach, while the marshes themselves can easily be overflowed with fresh water, as cranberry culture requires, by the streams flowing from the hillsides on the east. Although much of this land is in Pacific County, we hope to make the Grays Harbor Country its outlet. To this end we have recently completed an excellent road costing \$15,000, including a drawbridge costing \$6,000 opening that section to us. Already we are receiving inquiries from extensive cranberry growers of New Jersey and other far Eastern points. The large yield and the size of the berry of this region astonish them."

A similar wealth of tide marsh land is tributary to all the "harbor towns," there being altogether between twenty-five and thirty thousand acres of this land around Grays Harbor. Undoubtedly, the rush of town-building and heavy milling operations of the past three years have



A THRESHING OUTFIT AT WORK IN THE PALOUSE COUNTRY, WASHINGTON.

Threshing is either done direct from the wagons that haul the grain to the machine from the header as fast as it is cut or from a stack. The car at the left of the picture is a boarding house on wheels, where the men get their meals.

the water that can be used on a farm, run a wood saw, do the churning, run a washing machine and clothes wringer and turn an ice cream freezer. It will not be long before every farmer will have a machine in his house to generate electricity attached to his windmill. He will cook, and light his house by electricity generated by his friend, the wind. Instead of getting up cold mornings to build a fire, the North Dakota farmer will press a button at the head of his bed and turn on the electricity generated by the wind—while he has been soundly sleeping and dreaming of future greatness through the night. It will not be long till fire wood and sulphur matches will be a thing of the past on the Western farm. There is not a fairy land ever dreamed of that will compare with South Dakota when our machinery is in place—the more the blizzard rages and howls, the fiercer the wind, the faster the mill will run, and the warmer and lighter it will be inside—the North Dakota farmer will just sit and smile between the contending elements—the outside and the inside. He will stand on the inside and smile, radiant with comfort, to see the

"Why," was the reply, "we have been so busy establishing towns and getting our mills in operation that we have not had time to develop this somewhat slower source of our wealth. But you must not imagine that we do not realize or appreciate its value. Right contiguous to this town we have probably 6,000 acres of tide marsh." Pointing to a sectional map hanging upon the wall he said: "Here is a tract of 1,000 acres, the old Wooding property, now owned by parties who will reclaim it. Near by Senator Cooper of Chehalis County has 1,100 acres, one piece of which, 500 acres, can be reclaimed by a dyke of 300 yards. Around the Bay, Peterson of Peterson's Point has probably 800 acres of the same. East of the town on the Johns River is another thousand acres. Edwin Croft has here 400 acres, and the Campbell place contains 500 acres of tide marsh. There are, in addition, immediately adjacent to the town about a thousand acres of scattered tracts that might be easily reclaimed. Besides these tide marsh lands, there is, lying south of us, just back from the ocean beach, a tract of fresh water marsh land

delayed their speedier development, but they are marvelously fertile. In the official report for 1885 of the Department of Agriculture on "The Tide Marsh Lands of the United States," the statement is made that "reclamation has nowhere been so popular and uniformly successful as on the shores of Puget Sound," and that "perhaps no other farm lands in the country have for a series of years yielded so large returns on the invested capital as the dyked lands of Puget Sound." Reclamation of these Grays Harbor tide marshes will result in a like verdict. A year ago the writer had pointed out to him in Skagit County, on the famous LaConner oat flats, a tract of land which for seventeen years had continuously grown oats. During these seventeen consecutive years of production nothing had been returned to the soil, the straw, even, burned. And yet the yield of the seventeenth year averaged ninety-five bushels of oats per acre. This wonderful record these Grays Harbor tide marshes will repeat, for they are in nature identical. They are bound to create wealthy communities in a few years.



Frank C. Teck, of New Whatcom, Wash.

Frank C. Teck, whose name is often seen in this magazine, attached to verses of genuine poetic quality, was born in Northfield, Minn., November 12th, 1868. He received a common school education in Minneapolis from 1877 to 1882 and afterwards spent four years on a farm which his father purchased near Felton, Clay County, Minnesota. In 1886 he returned to Minneapolis an orphan. In 1889 he went to New Whatcom and engaged in newspaper work, serving at different times on the *Reveille*, the *Gazette* and the *Bulletin*. For the past two years he has been city editor of the *Express*. In the following poem he makes a happy attempt at handling



FRANK C. TECK.

the German-American dialect and enters a field in which Chas. G. Leland, with his "Hans Breitman Ballads," has won abundant laurels:

EIN SONNET.

Der time vas, Gretchen, ven ve used to be
So happy like dot leedle shnoozzer dere.
Ungonshus off a ting but luff; no care,
No drubble; shust you like to be mit me
Unt I vas grasy ven away. . . . You see
Ve're growing oldt—yes ve're a wringled pair.
Unt all der wringles tell but part der share
Off vat we haff gone drough unitedly.
Oh, let's feel young in heart vones more unt glide
Like children drough vat years ve haff to come;
Before der glock of Life, its pendulum
Vorn outd, shtands vidout shpeakin' by our side.
Ve've worked enough, so not more tears ve'll shed;
Let's liff dis life, ve'll soon be mit der deadt.

Ray Richmond, Editor of "The Happy Home."

Ray Richmond is probably the youngest editor in the United States. She commenced writing at fourteen, and her pen has never since been idle—stories, editorials, poems, essays, chats and reviews following fast, one after the other. Her writings are wholesome and bracing as the sweep of the western winds.

She is a rapid worker—an advocate of the German method that believes in resting the mind in one direction only by applying it in another. Besides her editorial duties in various departments she has written four serials in the last three years and is now at work on a book—her odd moments, the while, being usefully woven into song or story, practical articles, jingling rhymes, or dainty bits of prose.

That she is an observant reader, is seen from her book reviews; a keen judge of human nature, is evidenced by her character studies; and a clever hand at reporting, is shown by her newspaper work. She knows no idle moments, but still she regrets that she cannot find sufficient time for her chosen work!

She has received prominent mention in "Poets of America," many of her poetic selections being there reproduced. Personally, Ray Richmond is clever, bright and versatile—a charming type of the Western girl—wide blue eyes, blonde hair, and a hand and arm fit for a sculptor's model.

Editorial work has always had a fascination for her. When only sixteen she edited a young folks' department in the Minneapolis *House-keeper*, and since then she has had charge of a literary department in *The Ladies' Magazine*, a household department in a farm paper, and is at present editor of *The Happy Home*. She is also a contributor to some fifteen or twenty other more or less prominent periodicals.

Pease With and Without.

Granville S. Pease, editor of the Anoka *Union*, is one of the best known and most popular of Minnesota journalists. His good humor, good sense and genial comradeship have endeared him to the entire circle of brother writers with whom he foregathered at the annual reunions of the State Editorial Association. He is familiarly and affectionately known as "Old Pease." For many years the top of his head has been as bare as a billiard ball and when he lately appeared in a wig the change in his appearance bewildered his acquaintances. He looked like a new edition of himself, revised, embellished and redated. A photographer hit upon the happy idea of picturing the two Peases side by side, and we reproduce the photo on this page. The standing figure might readily be taken for a son of the wise-looking elderly man at the desk.

Mr. Pease was born in Albany, New York, in 1845, came to Minnesota in 1857 with his parents and settled in St. Paul, where his father engaged in the banking business under the firm name of Bostwick, Pease & Co. In 1859 he was a carrier boy for the *Daily Minnesotian*, Major T. M. Newson editor, and later learned the printing trade in the *Press* office. In 1863 he went to Minneapolis and worked on Bill King's paper, the *State Atlas*. April 2d, 1866, he moved to Anoka and became the publisher of the *Union*, and in June of the same year became sole owner and proprietor of the paper before he was of age, and has remained its editor and publisher up to the present time. Fortune has been kind to him and he boasts of one of the best country printing offices in the State, a good home and a number of pieces of good business property. He is in love with his profession and has a warm spot in his heart for every newspaper man in the State. A number of Mr. Pease's newspaper friends were favored with these photos and, according to the *Union*, the comments thereupon "were beaming over with expressions of esteem and good will."



Ray Richmond.

An Idaho Editor's Rhymes.
We sit in our den at midnight, when the clock is ticking away, and we think of the cash subscriber who has wandered in to-day. We count o'er all the good things that two-and-a-half will buy, and the joy which the thought brings to us gushes forth from our pale-blue eye. How often! O how often! in the days that are to come, do we wish for the cash subscribers to hustle themselves and come. How often! O how often! as the days are moseying past, we would long, if longing would help it, this cash business would last. But, alas! our heart is weary, likewise our pale-blue eyes, for few and far between meals comes to us such glad surprise. Yet we sit in our den at midnight and scratch with a stubby pen, and long for the cash subscriber to wander in again. And we think mayhap some delinquent may want to witness our smile, and may happen in to-morrow and swell our little pile.—North Idaho Star.



EDITOR PEASE WITH AND WITHOUT HIS WIG.

PRUNE GROWING ON THE COLUMBIA.

BY E. V. SMALLEY.

The oldest prune orchards in the Pacific Northwest are found on both sides of the Columbia River near Portland. Here the business of growing and drying prunes is well established and its conditions and profits are thoroughly understood. Mature orchards that have borne fruit for many years may be examined and the experiences of successful growers learned from their own lips. I would advise all who contemplate buying old orchards or planting new ones to spend a few days in this region. The orchards on the slopes of Mount Tabor, on the Oregon side of the river, are only about five miles by electric car from the center of Portland. Those at Vancouver, on the Washington shore, are almost as easily reached, an electric line running across the peninsula from the Willamette to the Columbia, through suburbs of Portland all the way, and connecting with a ferry that lands its passengers at the foot of the main street in Vancouver. All around the pleasant, shady town, on high benches and hill slopes, lie the orchards. Prune trees greatly predominate, but pear, peach and apple trees are also numerous, most of the prune growers devoting some space to these fruits.

The oldest orchard in Vancouver was planted sixteen years ago, by A. W. Hidden, who is still its owner. It covers twenty-two acres. Mr. Hidden values it at \$2,000 per acre, but says that its contiguity to the town accounts for \$500 an acre of its price. If it were located four or five miles away he would still refuse any price for it below \$1,500 an acre, because it gives him good interest on that figure, after paying all expenses. It has never failed to make him a reasonable profit in years when the yield was the lightest.

Clarke County, Washington, lies along the Columbia, just west of the Cascade range of mountains and is therefore in the rainy belt. Its climatic conditions are not different, however, from those which prevail on both sides of the Columbia all the way from the mountains to the sea and through the whole of Western Washington and Western Oregon. There are flourishing prune orchards in the Willamette Valley, in the Chehalis Valley and on the islands of Puget Sound. The Clarke County growers claim that they have a peculiar soil—a clayey loam with a small admixture of shot gravel. This rests upon a clay sub-soil. Some growers insist that a clay subsoil is essential to hold the moisture about the roots of the trees during the dry weather of August and July, but others can show good orchards on land where the subsoil is gravel. I am disposed to think that the principal local advantage of the Clarke County orchards lies in their situation on the plateau and on the hill sides high above the river, where they are in no danger from the spring frosts that sometimes touch the low lands, and that the almost universal success of the orchardists in this county may be attributed to the fact that the business is already an old one and the best methods of pruning, of cultivating the ground between the trees and of drying the fruit are well understood. Prune land commands a higher price here than in any other locality in either of the two States, with the exception of the Mount Tabor district just east of Portland. It is only natural, however, that this should be the case. The purchaser feels that he is taking no chances here. He knows that sixteen years of orcharding have amply demonstrated the fitness of the climate and soil for prunes, and knows too, that if he plants an orchard he will have the great advantage of the counsel of neighbors who have been long in the business and who will ad-

vise him from their own experience at every stage of his progress.

Wild land heavily timbered costs about \$100 an acre if it lies within a few miles of Vancouver and is regarded from its situation and slope for natural drainage as good orchard land. To get the trees and stumps off this land costs from \$100 to \$150 an acre. Some tracts that have been swept by forest fires can be cleared for \$50 or \$75 an acre. Let us suppose that a purchaser buys ten acres and plants a prune orchard. His land ready for planting will cost him say \$2,000, and \$200 may be added for fencing. He puts in 108 trees to the acre, which places them twenty feet apart. These are peach shoots one year old, budded with prune buds and they cost six cents each. Fifteen dollars an acre may be set down as the cost of the trees and the planting of the orchard, and if the owner hires all his work done he can allow six dollars an acre each year for cultivating. To bring an orchard up to the bearing point takes five years and the total cost of the ten acres of prunes in good bearing condition may be figured at from \$2,500 to \$3,000. Every year of the growth of a young orchard adds a dollar to the value of each tree. The ten-acre orchardist has, therefore, by no means lost his time during the five years of waiting for the bearing of his trees, because if he has done nothing else in the meantime but cultivate his orchard he has earned \$1,080 a year. Settlers who are developing prune orchards are sure to earn a support for their families, however, while waiting for fruit. They have a little land in vegetables, they keep cows and chickens and they earn wages working for others.

The fall is the best time to set out trees. The next spring after planting, all buds are stripped off except five on each twig. From each of these there will be a growth that year of from one and a half to five feet. The ensuing spring, a few blossoms appear on the trunk, which are pinched off. A year later a few prunes may be obtained, but this is not thought to be wise. Everything is done to direct the vitality of the young tree into the making of a strong trunk and an umbrella shaped growth of branches. At four years old the tree yields a small crop and it increases its yield until it is eight or nine years old, when it attains its full bearing age. There are no orchards old enough in this region to begin to show any decline in fruit-producing power. A prune orchard must be cultivated so as to keep it entirely clean of weeds and grass, and any neglect is shown in the amount and quality of the fruit. The approved method of cultivation is first to run a one-horse plow close up to the trees and then to go between the rows with a wide two-horse cultivator. Pruning should be done just before spring, although some orchardists prune in the fall. This operation requires more skill and judgment than any other.

Now let us see what can be expected of a thrifty, well-tended prune orchard. At five years old such an orchard should yield 15,000 pounds of green fruit to the acre and at six years 18,000 pounds. It takes about three and a half pounds of green fruit to make one pound of dried prunes. A moderate estimate is 4,000 pounds of dried fruit per acre. Prices range from four cents to ten cents per pound. An orchard should produce for its owner, taking a series of years, not less than \$300 per acre. The drying is done in dry-houses by hot air from furnaces. The fruit is placed on trays which are slid into a wooden compartment to which the hot air is conducted. Thirty hours are required for drying. Then the fruit is piled up on the floor of the dry-house and goes through a sweating process which gives it a glossy appearance. A few growers sort the dried fruit but the general rule is to box it as it runs, placing a layer of large prunes on the bottom of the box, which is the top when opened, and then filling up

from the heap. Wheel dryers are in use and there is also a contrivance to take a draft of hot air through the drying compartment so as to hasten the process, but most growers stick to the old-fashioned cheap furnace. The prunes from Turkey, which are the cheapest of all in our Eastern markets, are sun-dried upon the ground. This method accounts for their dirty and fly-blown condition.

The fruit is not picked from the trees in these Oregon and Washington orchards; nor is it shaken off rudely. Every two or three days while the prunes are ripening each tree is jarred with the hand just enough to cause the fully ripe fruit to fall. Some growers dip the fruit in a lye wash before taking it to the dry-house. This crinkles the skin and prevents it from breaking and allowing juice to escape during the drying. This process is, however, exceptional.

All the growers around Portland and Vancouver use the Italian prune as the standard. They regard the silver prune as rather a fancy variety—more of a plum than a prune, they say, and best adapted for eating uncooked. The large Hungarian prune is not a profitable bearer and the fruit is too acid to be adapted for the general trade. They speak slightly of the little French prune, known as the *petite* prune, as doing very well for California growers, who cannot raise in their dry climate the better Italian variety. Certain it is that these big, blue-black Italian prunes leave nothing to be desired. They ripen thoroughly to the stone; they dry without deadening their natural flavor and when cooked they swell out symmetrically to almost their original size. People who have only eaten foreign prunes do not know the capabilities of the fruit. They no doubt think of prunes in connection with cheap boarding-house tables. Let them try the prunes grown on the Columbia River or in the Yakima Valley and they will enjoy a new gastronomical pleasure. They must be sure, however, that they are not put off with California prunes in place of Oregon or Washington fruit. California raises good prunes but they do not compare with those grown in the Pacific Northwest.

With the superior quality of this Northern fruit assuring for it a preference over all other prunes, there need be no apprehension on the part of the growers that they will overdo the business by increase of the orchard area. Prices are affected, not by the quantity of American fruit placed on the market, but by the amount of foreign fruit shipped in. The foreigners will always undersell us, because their labor costs but a trifle and they dry their fruit in the sun; but they cannot compete in quality with our growers. Most purchasers will prefer to pay two or three cents a pound more for our superior American fruit, just as they buy large, handsome, juicy apples rather than small wormy ones. There is no safer business than prune-growing. If the present acreage in orchards were multiplied by fifty the American market would absorb all the product. Five acres in a good bearing orchard will support a family; a twenty-acre orchard is a modest fortune.

One of the greatest features of interest the Northwest has to offer tourists is the wonderful gorge of the Columbia River, a few miles west of Celilo. At this point the entire volume of the mighty river, which is navigable for nearly 1,000 miles from its mouth, rushes through a gorge scarcely 130 feet wide. The amount of water carried by the Columbia at Celilo can be appreciated from the statement that one of its branches, the Snake, hundreds of miles inland, forms a waterfall second in magnitude and grandeur only to Niagara. Immediately above the gorge the Columbia is from one-half to one mile wide, and for a distance of 500 miles beyond Celilo its dimensions entitle it still to be called a great river.
—Portland Oregonian.

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E. V. SMALLEY, - EDITOR AND PUBLISHER.

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ST. PAUL, MINN.

ST. PAUL, APRIL, 1894.

NOTED IN WESTERN MONTANA.

The greatest gold mine in Montana is now the lately developed "Royal," at the head of Boulder Creek, a small stream that puts into Flint Creek not far from the town of Drummond. This mine is now yielding a net profit of \$17,000 a month. The owners have spent \$70,000 in its development and in the erection of a ten-stamp mill, and a million dollars in cash would not buy it to-day. In fact it is paying one per cent a month on \$1,700,000 and it has ore enough in sight to last five years. There are probably dozens of almost equally valuable gold leads in Montana, hidden in the mountains. To develop a prospect into a mine takes a good deal of money and a good deal of courage. The men who discover the prospects have nerve enough but they rarely have any money. In many cases half a life-time is spent by the owner of a good prospect trying to persuade capitalists to put money into the work of opening it up and demonstrating whether it is worth anything or not. The chief owner in the "Royal" is Nelson Bennett, of Tacoma, Washington. He made a fortune boring the long tunnel through the Cascade Mountains for the Northern Pacific and he increased his wealth by a lucky deal in Fairhaven, from which he got out in time to avoid the collapse which nearly ruined that town. Then he bought a big hotel and a morning newspaper in Tacoma and just before the financial panic of last summer he purchased a controlling interest in a bank. The bank went to pieces; the hotel did not pay and the newspaper sunk money, as most of the dailies in the West have done during the past year. Just in time to help Bennett out of an uncomfortably tight place came the rich strike in his mine. The "Royal" is now well developed by two tun-

nels and a shaft, and it shows the most remarkable body of rich gold ore known to exist anywhere in the United States.

The handsome, well-built town of Missoula feels the pressure of the hard times about in the same degree as do all other towns in the Northwest. It has more elegant brick and stone business blocks than it can make profitable use of at present, but they are not heavily mortgaged and will all be good property when the general business revival comes. One of its banks is still closed. The leading newspaper, the *Missoulian*, suspended its daily edition for a short time at the height of the panic, but has now resumed its publication. An important irrigation enterprise is being carried out by the First National Bank. A flume is carried along the rocky walls of Hell Gate Canyon for several miles to feed a canal which runs for six miles across the peninsula between the two rivers and waters about 8,000 acres of good land, well adapted for gardens and orchards.

The Montana capital fight appears thus far to be a one-sided affair. Anaconda is doing all the work, or rather Marcus Daly is doing it for Anaconda. Helena will be in the field before long, however, to defend her long-time possession of the seat of government. The theory of the Helena people is that the State will become tired of the Anaconda campaign long before election, that there will be a reaction against the effort to remove the capital to Marcus Daly's smelter village, and that the time will then be ripe for effective work in behalf of Helena. The struggle is a very curious one. Anaconda got into the race for the final heat at the free-for-all contest of a year ago last fall. The money and energy of the copper king, Daly, put her there. Save for Daly nobody would have thought of Anaconda as a capital possibility. The place is supported solely by the big works of the Anaconda Copper Company. It is handsomely located in a mountain cove on the western side of the State, and is reached by two railroads that go no further and serve to connect the place with its big neighbor, Butte. Daly is spending a great deal of money in carrying on the campaign. He has indomitable energy and is a good political manager. His wires are laid all over the State and Helena is beginning to be afraid of him. Daly liberally sustains at Anaconda the best daily newspaper in the State. The *Standard*, issued in a town of not over 2,500 inhabitants, has a full telegraphic service and covers thoroughly with a staff of correspondents the entire field of State news. It has a large circulation and is a power in the capital fight.

That republics are not always ungrateful is shown by the action of the Government in the matter of the Flathead Indian Agency. Major Peter Ronan, a Montana pioneer and a man of genial and original character, held the office for more than twenty years. He brought the Indians up to a self-supporting condition and a well advanced state of civilization—for Indians. He had the confidence of all administrations at Washington. Last summer he died, leaving a wife and a large family of children and very little property. President Cleveland appointed as his successor a nephew of Mrs. Ronan, who had been chief clerk at the agency for some time. Mrs. Ronan still lives in her old home at the agency, with her children. Her oldest son holds a clerkship there. Mrs. Ronan is beloved by all the Indians and exerts the same good influence over them that she did during her husband's lifetime. The Flatheads were converted to Catholicism by Jesuit missionaries who established themselves in the Rocky Mountains nearly fifty years ago. The Catholics maintain large schools for both

sexes and a mission church called St. Ignatius in the Mission Valley, about twenty miles from the Flathead Agency.

NORTH DAKOTA LIGNITE.

The lignite coal of North Dakota, which crops out in solid veins of from two to twenty feet in thickness all over the hill country west and north of the Missouri River, is steadily making its way eastward as a good, economical domestic and steam-making fuel. A few years ago its use was restricted to Bismarck, Mandan and the settlements further west. Only two years ago it was necessary to give it away in Fargo to persuade people to burn it. During the past year the Northern Pacific has hauled over 700 car loads of it, all to points within the State. The Soo and Great Northern roads have also made fair beginnings towards bringing it into use along their lines. Recent scientific tests show that the best of this coal has a heating power equal to seventy-three per cent of that of the Yoougiogheny, Pennsylvania, bituminous.

Last month the question of the practicability of introducing this lignite in the Twin Cities of Minnesota was taken up by the St. Paul Chamber of Commerce and the Commercial Club. Representatives of mines along the three railroads named came down from North Dakota and conferred with committees of manufacturers. Arrangements were made for trials at the Harvester Works and the Car Wheel Works. One great merit of lignite is that it burns without smoke. Visit in winter a town like Mandan, where this fuel is burned in every house, shop and store, and you will not see a trace of smoke in the air. What a blessing it would be if it could be brought into general use in steam-heating furnaces and under factory boilers in our two cities, where we are now deluged with foul masses of black smoke from hundreds of belching chimneys! The cost of lignite on board the cars at the mines is now one dollar a ton, and this figure can be reduced when larger operations are carried on. It is nearly if not quite as strong in heat-producing power as the Illinois and Iowa coal now generally used in the Twin Cities for all purposes except domestic fuel. Illinois coal is hauled about 400 miles by rail to get here. North Dakota lignite would have to travel about 500 miles. Pennsylvania coal has a rail haul of from 300 to 400 miles and a lake carriage of one thousand miles to reach our consumers. Therefore the distance of the lignite mines from us ought not to put a veto on the movement for burning this smokeless fuel in St. Paul and Minneapolis.

In this connection we may with propriety call attention to the recent invention in St. Paul of both heating and cooking stoves especially adapted for burning lignite. To get the best results with this coal a strong, direct draft is needed and the grate bars should be close together. The St. Paul Stove Works, after six months of careful experimenting, has succeeded in making stoves that give very satisfactory results in comparison with anthracite stoves of the most approved patterns. Trials recently had at the works were attended by committees from the commercial bodies of St. Paul and by a delegation of mine owners from North Dakota. All were highly pleased with the experiments. The success of these stoves assures a wider market for lignite. It is fast becoming the popular cheap fuel of North Dakota and it will certainly make its way into Minnesota. Its introduction in South Dakota is resisted by the railroads operating in that State, which now have a long haul on Eastern coal from Chicago and Milwaukee. In time the railroad managers will see that whatever promotes the general prosperity of the people along their lines helps enhance their business and they will aid instead of discouraging the burning of the cheap fuel mined in the sister State. What

the roads may lose on coal business they will more than gain in merchandise traffic and passenger business. We are confident that in a few years the vast lignite deposits of North Dakota will employ thousand of miners and will become an important source of wealth to the great Prairie State.

THE RAINY LAKE GOLD FIELDS.

It is a singular fact that nearly all "stampedes" to new gold discoveries begin in the winter. This is perhaps accounted for by the fact that the limitations and drawbacks to such discoveries are not so evident when the snow covers the ground and prospecting is attended with great difficulties as during the more favorable seasons of the year. There is in winter a wide field for the imagination to picture the possible wealth that may lie under the snow. All ground is then gold-bearing in the mind of the enthusiastic seeker for sudden wealth. The rush to Rainy Lake that began last February, when there was three feet of snow on a level throughout the Northern Minnesota woods and when the mercury frequently dropped to forty below zero, in some respects parallels the famous Cœur d'Alene stampede of the winter of 1884. Northern Minnesota, along the Canadian line, is almost as absolute and difficult a wilderness now as Northern Idaho was then. In the case of the Cœur d'Alene excitement, however, the motive was placer gold, which is the poor man's form of mining wealth, because it can be worked without other capital than muscle, a few picks and shovels and a grub-stake. Our new Hyperborean Eldorado in the pine forests of Itasca and St. Louis counties does not offer this incentive. Its gold is found in the rocks, and the motive of the crowd that tramped across the snow and slept on birch boughs was not to mine, but only to secure possession of land containing gold-bearing strata. In the difficulties of the undertaking, however, the hardships endured by the adventurers, their unreasoning zeal and eagerness and their exaggerated notions of the mineral wealth contained in the region, the stampede to Rainy Lake compares very closely with that to the wilds of the Cœur d'Alene Mountains ten years ago and recalls vividly that episode in recent Northwestern history.

Rainy Lake is a long, narrow, irregular sheet of water, about seventy-five miles in length and furnishing for about half that distance a part of the International boundary line. The Canadians have long maintained a military post on its northern shore called Fort Francis and our Government keeps a custom house officer near by to look out for opium smugglers. What little population there was along the lake before the gold excitement broke out was mainly composed of Chippewa Indians and half-breeds. Gold has long been known to exist on the Canadian side of the lake, but it was not thought to be worth mining. The Canadians have sunk a good deal of money in both gold and silver mining during the past fifty years at various points in the rugged wilderness along the north shore of Lake Superior and the east shore of Lake Huron, and they have grown cautious about trusting the tales of prospectors. No sooner were chunks of quartz found on our side of Rainy Lake, however, than essayed forty or fifty dollars to the ton, than multitudes of ordinarily sane people were seized with the gold fever and set off for the lake in the dead of winter. By the first of March a town had been established called Rainy Lake City, and almost every acre of ground within twenty miles of it had a claimant. All supplies had to be hauled through the wilderness from Tower on the Duluth and Iron Range Railroad, a distance of about seventy miles, the road running for nearly one-fifth of the way across the ice of Vermillion Lake and Kabetogama Lake. Since the breaking up of the ice and thawing out of

the road the route has become much more difficult and a good deal longer. Another route has been opened from a point on the new Mesaba railroad. In spite of the obstacles and hardships of the journey there are now probably not less than one thousand people in and around the new town.

We do not wish to be looked upon as croakers, but we have very little faith in the mineral wealth of the Rainy Lake region. From such definite information as has reached the daily newspapers we are disposed to think that there is only a thin crust of gold-bearing rock resulting from what geologists call an "overflow," and that no fissure veins will be found. If such veins do exist they will not be numerous. In all Montana, which is now the leading State in its production of the precious metals, there are probably not more than a score of good paying gold quartz mines. It is absurd to suppose that the whole shore line of Rainy Lake and all of the numerous islands it contains are going to furnish a mine for every quarter-section of land. If three or four genuine fissure veins are found carrying ore good enough from wall to wall to run through a stamp mill with a reliable profit, the region will be in great luck, and the whole State will have reason to feel happy over an important addition to its resources. In the event of no paying mines being developed some permanent good may result from the stampede in the settlement and cultivation of a district by no means destitute of attractions to the farmer.

MEDICAL MONOPOLY.

B. O. Flower, the editor of the *Arena*, is a daring knight errant in the field of literature, who is always ready to run a tilt at any abuse or wrong, social or governmental, which he may catch sight of. His latest attack is on the legislation which in many States gives a monopoly of the healing art to two or three schools of practice and punishes as a crime all attempts to cure the sick by any other methods. Such legislation is always adopted at the instance of the doctors and on the plea that the public needs protection from quacks. Its real motive is self-interest, however, rather than a regard for the welfare of the people. Mr. Flower was led to his inquiries in this direction by the illness of his wife. She had a distressing cough following an attack of pneumonia. An eminent physician in St. Louis diagnosed her case as advanced consumption and assured Mr. Flower that she could not survive the spring. She was taken to Washington, where an eminent specialist for consumption decided that she did not have that dread disease, but was suffering from anemia and gastric catarrh and that there was adhesion of the right lung. He pronounced her condition critical and said that if she continued to lose flesh her dissolution was close at hand. Mr. Flower then took the invalid to Aiken, South Carolina. All nourishment gave her pain and the only food she could take was beef juice. A gentleman who sat at the same hotel table with Mr. Flower and his mother-in-law told them that he had suffered from a similar trouble and had cured himself by eating raw oysters with capsicum on them. Mr. Flower put a few drops of capsicum in the beef juice and was delighted to find that the invalid, for the first time in six weeks, suffered no distress after taking the nourishment. He reported what he had done to the doctor, who was alarmed lest inflammation of the stomach should ensue, but after he had examined the patient he said, "Continue the capsicum." The lady improved and was able to return to Boston, but had an attack of the grippe. Her stomach trouble and cough came back and she grew steadily worse, losing all hope and interest in life. At this juncture Mr. Flower employed a metaphysician, on the advice of a friend, and under his treatment the lady was entirely

cured in two weeks. She had no relapse and has never since taken a dose of medicine.

Mr. Flower's point is that had he been a resident of one the "medical slave States, Iowa, for example"—he might have added Minnesota—this mind-cure doctor would have been liable to arrest and imprisonment for curing one whom the regular physicians were powerless to aid. Had Massachusetts been cursed with a medical monopoly law, death would unquestionably have robbed him of his wife. He does not assail the regular school of medicine as a school, but he objects to the oppression, injustice and dangerous class legislation which members of that school seek to fasten on the people. His plan is that laws should be passed compelling every physician to have hung upon his office and consulting room walls certificates from the county clerk or other proper official stating his qualifications or lack of qualifications and the schools or method of practice he employs. Moreover every person professing to heal the sick should place upon his sign and upon his cards his method of practice and add, if he desires, the name of the college from which he graduated. Severe penalties should attach for false statements in regard to such matters, but beyond these restrictions the field of healing should be free to all, just as the field of business is. No board of doctors should have the power to decide who should be allowed to practice the healing art. It is the high and holy right of every intelligent man, says Mr. Flower, to employ in the hour of sickness the physician of his choice and to patronize the school or method which he believes to be the most rational.

Mr. Flower says that every great step in the history of medicine has been a protest against the barbarities of old methods and a rational appeal from the lower and more crude to the higher and more subtle curative agents. The trend has been upward and the methods safer. The value of herb medicines was scoffed by the old school, which formerly confined itself to strong mineral poisons, but now the herbs of the eclectics find their place in the U. S. Dispensatory, which is the bible of allopathy. Homeopathy was denounced as a silly humbug, but it has made its way and its influence has greatly modified the doses of the old school and has forced it to adopt several of its remedies. We are not yet through with the progress of the healing art. Hundreds of thousands of people boldly affirm that they have been restored to life and health by those who discard all drug medication and rely wholly on the subtle power above or on the unexplained influence of thought. Some believe that the healing power is delegated from unseen friends who have passed on to the next world and who now return to aid them. Others are persuaded that it is a divine influx direct from God, such as Christians believe was manifested to the early church. Another class ascribe this life-giving power to the awakening of their real Self, or the recognition of the Divine enthroned within the mind of man. Still others hold that disease is wholly or largely due to the mental images in the mind which may be erased through suggestion. Whatever the real explanation may be, the per centage of cures effected by these physicians who treat without drugs is unquestionably as great as that of the old-fashioned doctors who proceed to put foreign and poisonous matter into the stomach of a patient, no matter what his disease may be. When a patient dies in the hands of a mind-cure physician or a faith-cure physician, there is a great outcry in the newspapers and a demand for punishment, but the chances are that the very doctors who start this clamor have killed scores of people by their ignorance or their bigoted adherence to the prescribed remedies of their books.

Let us have freedom in healing. Give even

the cranks a chance. People will die in spite of the doctors. We may well doubt whether the Sioux medicine man, with his incantations and pow-wows, loses any more patients in proportion to the number he treats than the most eminent specialist of the regular school. The real issues of life and death are not in the hands of the physicians in a great majority of cases of illness. It is the patient's vitality that cures, not the doctor's drugs. It may be that we are on the eve of great discoveries in healing, in which that potent and little known factor in life called the soul is to play a part. In the meantime, let us get rid of all class laws which limit the right to practice medicine to men who believe in certain old methods. They are on a par with the old laws which formerly prescribed the religion of the people and punished all departures from it.

REFERENCE is made editorially on another page to the invention of stoves in St. Paul for burning lignite coal. The same manufacturing concern has been experimenting for months with a cooking range for burning hay or straw and has achieved a complete success. At one end of the range there is a very large fire-box divided into two compartments. In each compartment fits a steel fuel box, about two feet high and about one foot square at the bottom—in fact, a sort of a square bucket. In the center of the box is a cone perforated for air. If a moderate fire is desired only one of these boxes is filled with loose hay or straw packed in with the hand; both boxes burning at once make a very hot fire. A box contains about five pounds of the fuel. It is lighted from the top and there are air-holes in the lid over it and a damper draft at the side. With hay, one filling of the box lasts about forty minutes and gives a strong, steady heat. Straw burns a little faster. Extra boxes are provided so that as soon as one burns out another may be ready to put in its place. Experiments show that to keep a fire for ten hours, sufficiently hot at all times to roast beef or bake bread, about one hundred pounds of hay or straw are needed. In all the treeless country west of the Minnesota woods, stretching away to the Rocky Mountains, this invention will prove of great benefit to the farmers. The expense of fuel has always been the most serious drawback to the prosperity of the settlers on the plains. When the settler can warm his house and cook his food with fuel taken from his strawstack or from the swales on his farm where grass grows luxuriantly, he will be tolerably well fixed to grapple with the problem of making a living raising fifty-cent wheat. It should be added that by taking out the partition in the fire-box of this straw-burning stove and putting in a special fire-pot—a change that any one can make in a few minutes—the stove becomes a good lignite burner. Thus the farmer can burn hay or straw all summer, and when cold weather comes and a fuel is needed that will "keep fire over night," the cheap lignite of North Dakota can be used. It is said that for every human need there is a supply, if the need be felt long enough and strong enough. It looks as if the great need for cheap fuel on the prairies has been met at last, and the credit for meeting it must be given to St. Paul.

A WRITER living in the most northwestern city in the United States, Mrs. Ella Higginson, of New Whatcom, Wash., recently carried off the first prize of \$500 in S. S. McClure's competition for short stories. The title of her story is "The Takin' of Old Miss Lane." Mrs. Higginson is one of our contributors, and our readers will, we know, join us in congratulating her upon her success. She belongs to the best class of American realists in fiction—those who find in the everyday life of plain people pathos and humor, ennobling sympathies and affection and ample material for dramatic situations.



PROBABLY there are few if any among the gold seekers in the Rainy Lake region who know that there was a gold excitement in Northern Minnesota away back in the sixties. The late Major Newsom of St. Paul, always an enthusiast, was the chief boomer at that time. A company was organized by him in this city, and a quartz mill was taken out through the woods on sleds to work the ore from a supposed mine on Lake Vermillion. Nobody knows where that mill is now. Perhaps it will be discovered by some of the present prospectors, who may look upon its rust-eaten machinery with awe as a relic of some prehistoric race.

I HEARD in Duluth that the Merritts, who discovered the Mesaba Iron Range and who were popularly supposed to be millionaires a year ago, will clean up hardly anything at all in the deal with the Rockefeller syndicate, after their debts are paid. This is too bad. Minnesota is indebted to the enterprise and persistence of the Merritts for the development of the richest iron field in the United States. It seems that they were over-confident and kept on borrowing money to build their railroad and open their mines until the financial crash of last summer came. Then followed the enormous and almost universal shrinkage in values and the pressure of creditors to realize. Call loans were called and properties had to go for what they would bring in a time of extraordinary depression. How true it is, in nearly all lines of discovery and original effort, that one man sows and another man reaps!

I HAVE no faith in the practicability of a ship canal from Lake Superior to the Twin Cities. Nature has put a veto on the scheme. Such a canal, to be of economic value, would have to be wide enough and deep enough to admit to its channel and locks vessels of the largest size that now carry coal and grain upon the lakes; otherwise cargoes would have to be broken and transferred at the lake port of the canal. At present there is a depth of fourteen feet at the shallowest points between Duluth and Buffalo, and this will in a few years be increased to twenty feet. Add four feet more for water enough to float a ship and you have twenty-four feet as the necessary depth of a canal that would serve for the great freight carriers of the future. From Lake Superior to the summit between the streams flowing to the lake and those flowing to the St. Croix or the Mississippi the rise is over 650 feet, and at least twenty locks of enormous depth and size would be required on each side of the summit level. Any one at all familiar with the country around the head of Lake Superior will at once recognize the impossibility of getting water in sufficient quantity from such little streams as the Brule, or the Nemadji, or the St. Louis, in sufficient quantity to supply a series of great locks twenty-four feet in depth, through which the vessel movement would be greatest at the dry season of the year. It is all well enough for the Government to make the surveys and settle the question officially and finally that a modern ship canal cannot be operated between the lake and the Mississippi; but the energies and plans of the Twin Cities should not be wasted on this ignis fatuus of navigation. A low-grade double track railroad, owned and operated by

the two cities, is the only possible solution of the problem of cheap freights to and from the lake. Manchester, England, has constructed a canal at enormous expense to bring ships to her warehouses. If St. Paul and Minneapolis cannot become lake ports they can secure for themselves the main advantage of such a position—that of cheap freight rates—while continuing to enjoy their present decided advantage over Duluth growing out of their situation in the midst of a populous and extensive agricultural region.

PASSING through Dickinson, North Dakota, last month, I noted that the town has made a considerable growth during the past year, in spite of the universal business stagnation. Dickinson is mainly a cattle town. Some coal-mining is done in the neighborhood and there is a little farming, but stock-raising is the chief industry in all the surrounding country. Cattle are a surer resource than wheat. The price may be low, but the cost of raising the animals on the free, open ranges of Western North Dakota is trifling, and there is never a failure of the crop. The prosperity of Dickinson shows that the stockmen are doing fairly well. There is plenty of unoccupied range in that region and new settlers who want to put cattle out will not be discouraged by hostility from a round-up association.

DR. BUCKLEY showed me in Missoula last month, under a powerful microscope, the bacilli of consumption—mere elongated red specks scattered over a bluish background of sputum. It struck me at the time that the drawback to such scientific discoveries as bacteriology is making lies in the depriving of both doctor and patient of the hope of a cure. As long as the cause of disease was mysterious there was always the hope that some drug might in a mysterious way drive it out of the system. Now, as soon as the doctor finds the bacillus of consumption he knows that no medication will serve to expel the invading army of minute enemies from the lungs. In most diseases the bacilli have a fixed term of life, and the question is whether the patient will hold out until nature puts an end to their ravages; but in consumption and cancer the bacilli are chronic. They live as long as the patient lives. A discovery in connection with consumption of even greater importance than the bacillus of the disease has recently been made. It is that the disease itself is not hereditary but is contagious. The children of a consumptive patient do not carry any taint in their blood. They catch the deadly complaint by living in close association with the invalid.

A VISITOR to Helena sees many things of interest in that hospitable little city, but what surprises him most is sure to be the Montana Club. All club men know how difficult it is to maintain a club house of moderate dimensions even in a city as large as St. Paul; but here, in a town of eighteen or twenty thousand inhabitants, there towers aloft from a street which crosses the Last Chance Gulch of early mining days a noble structure seven stories high, superbly fitted up and all occupied for club uses except the ground floor. On one floor are the parlors and billiard room; on another the library, reading room and card rooms; on another the dining room, and still higher up are two floors devoted to sleeping apartments. I was told by Senator Sanders that the club pays its way and earns from its dues interest on the bonds issued to erect its building. The restaurant has been given up, although suppers can be ordered in advance. Helena is a town where everybody goes home in the middle of the day for dinner or lunch, and the club restaurant proved to be unable to pay its expenses. One considerable source of income arises from the custom of the bankers, judges, lawyers and

business men to close their working day at four o'clock and repair to the club for a sociable game of whist or "freeze-out" poker. No gambling is allowed, but the loser in each game pays for the cigars or drinks for the others. One can see any afternoon twenty or thirty of the principal citizens engaged around the card tables. The favorite game just at present is freeze-out, in which six cards are dealt to each player and in the discard and draw the hand is reduced five. The joker is included in the pack and counts for anything the holder wishes, making a flush, or threes, or fours, according to the status of the rest of the hand. This makes a lively game and some player in a party of four or five is sure to get to the bottom of his pile of chips in a short time. The Montana Club possesses the beginning of what promises to become in time an excellent general library. It also owns a few good pictures, among them an excellent half-length portrait of General Grant. The hospitality of its members is especially commendable. No man with any sort of acquaintance in the best business or professional circles of Helena can be in the city half a day without being invited to the club.

I SAW in the upper story of the N. P. passenger station at Spokane an institution that deserves high commendation. It is a club composed exclusively of railway employees and sustained by dues of fifty cents a month from each member. The club has a handsome reading room, supplied with magazines and newspapers, a billiard room and a bath room. Most of the members are young men with no homes other than their boarding houses. The club keeps them out of the saloons. It gives them a place for rest and sociability, with plenty of good reading and the healthful amusement of billiards, and it costs them less than the price of one glass of beer a day. It encourages cleanliness, temperance and study. The difference between the railroad man who rises from a brakeman to a superintendent and the man who remains a brakeman is not so much in original equipment of education or brain power as in the habits formed while young. One puts in his spare time in study and good reading; the other hangs about the saloons and reads nothing but trashy stories.

THE climatic peculiarities of different localities in Washington, depending on altitude rather than on latitude, are interesting. Wallula, on the Columbia, with an altitude of 340 feet, has an annual rainfall of only nine inches. Walla Walla, about forty miles distant, with an altitude of 1,000 feet, gets eighteen inches of average annual precipitation, and Dayton, thirty-four miles from Walla Walla, altitude 1,670 feet, enjoys twenty-seven inches. The three places are in the same latitude, but in going from Wallula to Dayton there is a steady rise as the Blue Mountains are approached. Dayton lies in the valley of the Touchet, but is well up against the slopes of the mountains. As a rule, in winter, when you start east from Tacoma you see no snow at all until your train approaches the Cascade Mountains. On both sides of the tunnel which pierces that range you find an enormous snowfall, frequently amounting to eight feet on a level. Descending the headwaters of the Yakima, on the east side of the mountains, the snow rapidly diminishes in depth. There may be a little at Ellensburg, but by the time you have reached the Sunnyside Country, in the lower valley, there will be none at all. You run for nearly two hundred miles across a bare country; then as you ascend to the Spokane plain, east of Ritzville, you meet the snow again and may find good sleighing in the city of Spokane. In Montana the general trend of the valleys, opening or closing them to the currents of moist air which blow from the west, determines the amount of snow. Thus the coun-

try around Helena is usually snowless, while twenty or thirty miles away, on the west side of the Main Divide, there is a moderate amount of snow during the three winter months. A marked difference in this respect also exists between the Missoula Valley and the Jocko Valley, but here the rule is reversed, the latter valley lying further west, being usually free from snow when the former has perhaps twelve inches on a level.

FOR the purpose of answering many inquiries as to the opportunities for settlement on lands under the new irrigation canals in the Yakima Valley, Washington, the Northern Pacific Passenger Department has just issued a handsome pamphlet, embellished with maps and numerous illustrations showing methods of irrigating, and crops and orchards watered by ditches. The Yakima Valley is a very attractive country for fruit-growing, hop-raising and general farming on small tracts, and there is a steady stream of intelligent settlers going out to occupy its highly fertile lands. The pamphlet is mailed free to all applicants who address Chas. S. Fee, Gen. Pass. Agent., St. Paul, Minn.

TWIN CITY MILLIONAIRES.

The writer of this was asked the other day to enumerate the millionaires in the cities of St. Paul and Minneapolis, says the *Trade Journal*. In these times of shrunken, even uncertain, values, the task, never an easy one, is all the more difficult. For it is admittedly true that a good many of the men who were in the list of millionaires a year or two ago accumulated their fortunes by acquiring real estate in the two cities. The multi-millionaires like J. J. Hill, Frederick Weyerhaeuser, Thomas Lowry and T. B. Walker accumulated their fortunes by other means than city real estate. Two of them in widely different operations in railway properties and two of them in pine lands. There is perhaps a tendency to put men into the list of millionaires who do not belong there, albeit they may be rich enough to crowd the million-dollar point. But within the past few years numerous instances have occurred where business men, known to be wealthy, have died leaving estates which, when the public came to know about them through the medium of the probate court, disclosed estates that in value far exceeded the estimates placed upon them by the unknowing. Several of these estates were largely realty, and the schedules, therefore, had to be presented in court.

Move Your Family West.

Some years ago a song with the above words for a refrain was very popular in this country. It was a companion to Horace Greeley's "Go West, young man." Now, however, that exhortation has lost its force, because, taking "West" as a synonym for wild and unsettled country, there is no West. Still the American is a restless creature not yet rid of the nomadic instinct inherited from his pioneer ancestors, and about this time of year many are considering a change of location. Though there is no longer much Government land, nor any extensive region without cities and towns, there is as much room as ever for new-comers. Minnesota has millions of acres of forest and prairie yet unoccupied; Nebraska, where corn is king, offers splendid openings to the industrious farmer and the hustling business man; Wisconsin has many a good chance for the man who is wide awake; Missouri has a wealth of soil, timber and mineral for the persistent seeker; Colorado has treasures of gold not yet discovered; Wyoming has room for flocks and herds innumerable; Northern Kansas has an unsurpassed climate and a wide expanse of fertile lands; the Black Hills of South Dakota teem with mineral wealth; while the older States

of Illinois and Iowa have golden opportunities for both farmer and business man, though a little more capital is needed than in newer regions. If you think of moving you will certainly find what you want in some one of these ten States, and to all portions of them the Burlington Route is the best road for the immigrant from whatever direction he may come. With terminals at Chicago, Peoria, St. Louis, Kansas City, St. Joseph, Omaha, Denver, Cheyenne, Deadwood, Minneapolis and St. Paul, it offers the traveler, starting from either east, west, north or south, a direct, speedy, safe and comfortable route to his destination in any State of those named. For tickets, maps and information apply to any agent of the Burlington or connecting lines, or write to W. J. C. Kenyon, Gen. Pass. Agent, St. Paul, Minn.

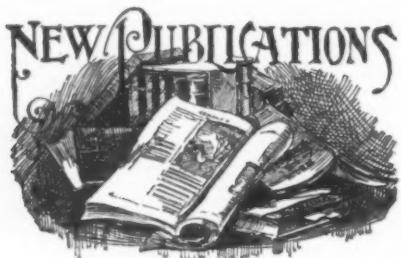
Coal Will Get Scarce.

Those who have had to buy largely of coal at high prices during the winter may gather cold comfort from the fact that posterity will have to use some other kind of fuel. Herr Nasse, the official mining expert of Prussia, holds that the next five or six centuries will exhaust the coal supplies of Europe; that the supply of Austro-Hungary, France and Belgium will peter out first, that of Great Britain next, with that of America a close third. In the meantime the existing supply will enable the Saint Paul & Duluth Railroad to speed luxurious trains smoothly between handsome terminals, as in the past. In this manner this route has justly earned the title of Duluth Short Line, and the popular esteem as the best line to take when traveling between Saint Paul, Minneapolis, Duluth, West Superior, Stillwater, Taylor's Falls and other points of interest and importance. Its trains are so convenient as to appeal to the business man as well as to the tourist, and the close connections with all trains are a decided advantage. For these reasons the Duluth Short Line has been famed as the popular route. Always take the Duluth Short Line. For time cards, rates, etc., apply to ticket agents, or write to W. A. Russell, General Passenger Agent, Saint Paul, Minn.

Does Water Run Uphill?

That water should run uphill is popularly supposed to be as impossible as it seemed to Macbeth that "Birnam wood should come to Dunsinane." In fact it is a favorite illustration of the impossibility of a thing being done. But it is a fact that the Mississippi does run up hill: that is, its mouth is higher than its source. The equatorial radius of the earth is thirteen miles greater than the polar. The distance on the circumference from either pole to the equator is 6,225 miles, making the up grade a fraction over two miles to the thousand. The Mississippi is 2,600 miles long, and the mouth would therefore be five miles farther from the centre of the earth than its source. Does not that mean that it runs uphill? In going from the Twin Cities to St. Louis the river would run uphill about a mile. But if you should make the journey over the Burlington line, you would never realize that you were making an ascent, so slight is the grade of the road, and so smooth the track. The most beautiful river scenery in the West lies along this route. In going South ask your agent for tickets via the Burlington Route, and for any other further information address W. J. C. Kenyon, Gen. Pass. Agent, St. Paul, Minn.

A WONDERFUL CAVE.—Near Lewiston, Montana, a cave has been found in which the explorers traveled for a mile over frozen floors. Rooms, the like of which was never seen before, were discovered, glistening with ice and minerals. Having blazed their way for the distance stated, the party returned.



People who have been carried away from their old common-sense moorings by the flood of socialistic literature which has inundated the country during the past few years will be helped to an anchorage on firm holding ground by the reading of Henry Wood's "Political Economy of Natural Law." The socialistic reformers, whether they call themselves Nationalists, Henry George single-taxers or communists agree in the contention that poverty and most other ills which afflict mankind grow out of the wrong construction of the edifice of society and can be remedied by changes in government, in legislation or in the relations of labor to capital. Their main idea is that great benefits will come from the external application of their theories. Mr. Wood maintains that all real progress must proceed from the improvement of human character and must work by evolution from within. Natural law, he insists, governs the form of institutions. The predominant motive of social economy, on the present plane of human development, is self-interest, but this does not always amount to selfishness, nor does it imply that individual interests are necessarily antagonistic to each other. Normal self-interest is not only honest, but is entirely compatible with philanthropy. Present conditions have their roots in the past and can be changed by the slow process of evolution. Forces now operative cannot be repealed but must be gradually outgrown. The hope of the future lies entirely in the expansion and uplifting of character. When altruism and brotherhood are kindled in the human soul they will find outward manifestation and nothing can prevent it. All growth is from within outward, for such is the eternal order and no human power can reverse it. The present social system—bearing in mind that its abuses are no real part of it—is the only one that will serve humanity in its present stage of development. As well fit an artificial shell to the back of a tortoise, as to frame any new external order to suit present ethical conditions and necessities. Economic evils, now so prominent and universal, are not the outcome of the present social system, but of the abuses which fasten themselves to it, consequent upon general moral delinquency.

The titles of a few of the twenty-four chapters will give some idea of the contents of the book. Among them are: The Law of Co-operation, The Law of Competition, Combinations of Capital, Combinations of Labor, Profit Sharing, Socialism, Economic Legislation, Can Capital and Labor be Harmonized, The Distribution of Wealth, The Centralization of Business, Booms and Panics, Money and Coinage, Tariffs and Protection, Industrial Education, etc., etc. (Lee & Shepard, Boston; price \$1.25.)

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"New Light from the Great Pyramid," by Albert Ross Parsons, is a book that will commend itself to students of the symbolism which underlies all religions and to mystics who believe that much of the history of nations may be read in the stars. Its sub-title is "The astronomico-geographical system of the ancients recovered and applied to the elucidation of history, ceremony, symbolism and religion, with an exposition of the evolution from the prehistoric, objective, scientific religion of Adam Kadmon, the macro-

cosm, of the historic, subjective, spiritual religion of Christ Jesus, the microcosm." The writer holds that the fall of Lucifer in the ancient myth, which finds its analogy in the traditions and religions of all people, signifies the disruption of a planet, the fragments of which constitute the asteroids, and the debris from which fell on the American continent and on the fabled island of Atlantis, blotting out a high civilization. He attributes to this disaster the supposed submergence of Atlantis and the deposit of the gravel and boulders called drift over the two Americas, which scientists account for by glacial action. In this portion of his book he follows closely the "Ragnarok" of Ignatius Donnelly. He supposes the center of the universe to be a certain star in the Pleiades and the great pyramid to have been constructed to point to that star. With this as a guide he maps out the constellations of the zodiac and the other chief star groups and finds that Lyra, sometimes called the eagle, comes over the United States, the Great Bear over Russia, the Dove over Egypt—dove's wings were used as a sacred symbol on Egyptian monuments. Perseus comes over Persia, Orion over the ancient Iran, Typhon over Thibet, and Capricornus, the goat, emblem of the god Pan, over the Isthmus of Panama. A multitude of other correspondences are traced by a careful etymological research. A vast amount of venerable symbolism in astronomy and old religion is found to apply to Christ. The book displays a remarkable learning, and while practical people will find its conclusions strained and fanciful, they cannot but admire the industry and ingenuity of the author. His idea that there is a universal religion of which all formal religions are the exoteric and imperfect manifestations, corresponds with the views of most advanced thinkers and of all students of the history of religious development. It is impossible to do more than merely hint at the complicated researches and arguments of this work. We have space only to add that Mr. Parsons believes that the people who built the great pyramid appeared suddenly in the valley of the Nile; that they came from America, the Meru of old geography, after the calamity of the rain of fire and gravel; that they were consummate astronomers, architects and geographers; that they were also astrologers and knew the meanings of the stars. Moreover, they came with a purpose to build the pyramid at a spot selected from the whole face of the globe. The result of their occupation of and works in the Nile Valley is thus referred to by Hermes: "Art thou not aware, O Asclepius, that Egypt is the image of heaven, that it is the projection below of the order of things above? If the truth must be told, this land is indeed the temple of the world." "New Light from the Great Pyramid" is issued by the Metaphysical Publishing Company, New York; price \$4.

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Nearly half a million dollars were expended on Funk & Wagnalls' Standard Dictionary before a single dollar was received from its sale. This fact is interesting as showing the great outlay necessary for a work of the kind and the confidence of the publishers in the soundness of the enterprise as a business venture. The first volume is now out and is exciting the critical admiration of literary men, college men and journalists all over the English speaking world. The general idea of the editors and publishers was at the outset of the undertaking to make a dictionary that should occupy a middle ground in bulk and cost between Webster's International and the Century Dictionary and thus meet the wants of a large class who find the first not sufficiently full and encyclopediac and to whom the price of the latter is prohibitive. At the same time they determined that they would produce no mere imitation, but would procure the best talent possible, lay out

original lines of philological research and carefully study all recent change and growth in the language. As the editorial work progressed the liberality of the publishers opened the way to many features not at first contemplated, such as very beautiful colored plates by Prang, showing flags, precious stones, orders and decorations, birds with plumage of natural colors, etc., and the scheme of small engravings worked in with the text was constantly amplified. Full recognition is given in the introduction of the first volume to the talent and labor of all the members of the great staff employed in the preparation of the work. There is no attempt to monopolize the credit of authorship by a single man or by a few men occupying the positions of heads of departments. On the contrary we find a list of names of editor-in-chief, consulting editor, managing editor, associate editors and more than two hundred assistant editors and specialists and with each is such information as to his position in the world of science, letters, education or special pursuits as shows his particular competency for the line of definitions assigned him.

In an interesting introduction the plan of action is explained. Working in the belief that the chief function of a dictionary is to "record usage; not, except in a limited degree, to seek to create it," the editors tabulated a list of about 300,000 words and phrases taken from the existing dictionaries. These were classified and, where necessary, given to specialists to define, great care being exercised in the treatment of words peculiar to localities, as those used in Anglo-Indian or Anglo-African communities. A feature has been made of technical trade and industrial words, examples of which are the "ell-pump" and "putty-joint," spoken of by the plumber during his labors in the cause of suffering domesticity, and the "clapper" of the house-builder. Thus the wants of clamorous labor which, it is said, "is knocking for admission as never before with its hundred hands at almost every door," are especially provided for. That the recent developments in science have been taken advantage of is shown by the fact that over 4,000 terms referring to electricity have been collected. . . . The style of spelling adopted is American, all the reforms introduced being in the direction of phonetics. With regard to quotations it has been, says the editor-in-chief, "a Herculean task to select, locate, and verify all the quotations used. Practically all English literature has been ransacked for this purpose, scores of thousands of volumes having been read, hundreds of readers in different parts of the world participating in the labor." Stock dictionary quotations have been avoided in favor of those modern authors, which are to serve the purpose "as well or better." "This," says Mr. Funk, "is a distinct gain." As some of the "best writing in English to-day is to be found in the high-class newspapers," quotations have been taken from that source. Such, then, is the scope and aim of the Standard Dictionary. We heartily welcome it as the latest and most authoritative exponent of our wonderfully rich and elastic English-American language—now the only language on the globe that is making rapid progress towards universality. The second and last volume will appear in May. The complete work costs, in the one-volume edition, from \$12 to \$18, according to the style of binding, and in the two-volume edition from \$15 to \$22. It is sold by subscription only. Published by Funk & Wagnalls, 18 Astor Place, New York.

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It is wonderful in how little time the reading public learns of the existence of a book that has any marked vein of originality. Perhaps we must bring in the new discoveries of thought transference to account for the sudden popularity, all over the English speaking world, of

a novel by some author previously not at all famous. A year or two ago it was Marie Corelli's "Romance of Two Worlds" that everybody was reading before the book reviewers were fairly aware of its existence. A little longer ago it was Olive Schreiner's "Story of an African Farm." Just now it is "Ships that Pass in the Night," by Beatrice Harraden, a new name in fiction. Four or five editions of this little book are already on the American market. The story is a very sad one. Most of the characters are invalids staying at a health resort in the high Alps, where consumptives go to prolong their sad lives. Nobody finds any happiness. The two invalids who fall in love only find out how much comfort they might have been to each other when it is too late. The girl is run over by a wagon and dies in a London hospital, and the man goes back to the Alps to wait for death. Why do so many people read so gloomy a book? Perhaps it is because it touches on the mystery of death and because they have been baffled in their own quest for happiness and have ceased to look for any real satisfaction in this stage of existence.

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Opie Read's last novel, "A Tennessee Judge," has added to the reputation well earned by the "Kentucky Colonel," "Len Gansett" and "Emmett Benlore." It is a strong, wholesome, realistic story of life in a Middle Tennessee county, as it impresses a young Chicago broker, who throws up his business because of ill health and buys an old blue-grass farm. The character of the Judge is admirably drawn and a good illustrator has pictured him so well on the title page that the tall, gaunt, lantern-jawed, grisly old man, with his old-time courtesy, his kind heart and his long-cherished hatred of a former political antagonist, is before your eyes all the while you read the book. Mr. Read is entitled to a place in the front rank of American novelists. He studies character closely and he has insight and sympathy. Above all he is natural. He was born in Nashville, Tenn., forty years ago. His education was earned in private schools, and in an institution called Neophogen College at Gallatin, Tenn. He edited in Franklin, Ky., a weekly newspaper which he denominates "limp," and continued his journalistic work in Arkansas. There, in 1882, with his brother-in-law, P. D. Benham, he started the *Arkansaw Traveler*, which he moved to Chicago seven years ago. He has for several years confined himself to his general literary work, with what brilliant success the play-going and novel-reading public can testify.

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"The King of Schnorrers—Grotesques and Fantasies," by T. Zangwill, is a volume of short tales, which takes its name from the first and longest story. They are all quaint and fantastic. Their author is no imitator. He strikes out a path for himself across the fields of literature which avoids all beaten ways. He has a keen sense of humor and a love for the odd and the grotesque. The "King of Schnorrers" means the king of beggars and the last-century Spanish Jew, living in London, who carries that title, is one of the most impudent, magnificent and amusing rascals that ever got into fiction. The book is profusely illustrated by a number of first-rate London sketch artists. (Macmillan & Co., New York; price \$1.50.)

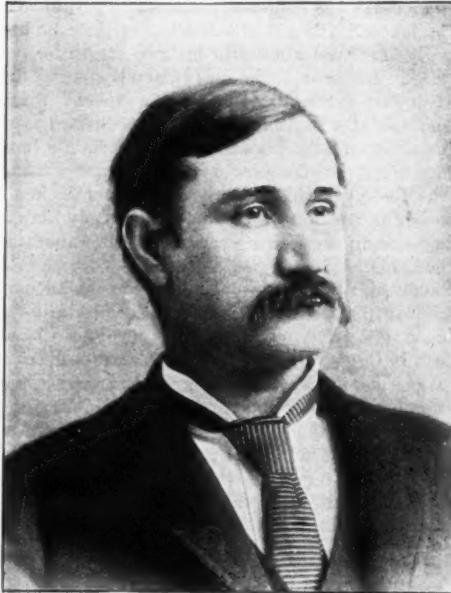
* * *

"Catherine Furze," by Mark Rutherford, is a story of life in a dull English market town fifty years ago. You are heartily tired of the commonplace people before you are half-way through the book and wonder what the author is going to make out of the ironmonger and his family, the doctor, the parson, the brewer and the boarding-school old maids, to justify him in trying to

make a romance out of their stupid affairs; but before you throw the volume down you strike a vein of vital human interest in the secret love of the girl heroine and the talented young married preacher for each other. They have the good sense and the moral fibre to restrain their emotions. The girl dies and the minister returns to the love of his good and faithful wife whom he has nearly killed by his indifference to her affection. Nobody is happy at the end of the story. The author does not go out of his way to make people miserable, but he might just as well have put a bit of bright color in his somber picture by providing at least one couple to be comfortably married in the last chapter. (Macmillan & Co., New York; price \$1.)

* * *

"Richard Escott," by Edward H. Cooper, is a story with a profligate English nobleman for its central character. The fellow is a gambler and is generally weak, despicable and vicious. He kills himself at the end of the book after giving his worthy relatives and his innocent children



OPIE READ.

a great deal of trouble to baffle his schemes to ruin the family in order to procure money for his vices. The story is well told, but it is not a pleasant one. (Macmillan & Co., New York; price \$1.)

* * *

The reading public is growing a little weary of books describing imaginary Utopias for the purpose of presenting theories of what might be done to improve government and society or what may possibly be done in the future in this direction. We have a flood of these books since the success of Bellamy's "Looking Backward." Some have located their Utopias on the planet Mars; others have projected them forward a century or two on our own planet. The latest effort imitates Bulwer's "Coming Race" and puts the imaginary ideal republic in the center of the globe. Its title is "From Earth's Center—a Polar Gateway Message." Its author is S. Byron Welcome. In one respect it is original—it takes no stock in socialistic notions. All other books in this line have been constructed on the theory that competition is the great evil of the present social state and that better conditions must come from its abandonment. Mr. Welcome thinks he sees in the unrestricted application of the competitive principle the way of salvation. In his mid-earth communities even the judgeships and the teachers' positions are given to the lowest bidders. (Chas. H. Kerr & Co., Chicago; price 25 cents.)

THE VANISHED LIFE.

Let me linger, let me linger where her footsteps used to fall;
Where her care and loving kindness once o'er-shadowed each and all;
Where the perfume of her sweetness lingers in each silent thought,
Touching with a gleam of sunshine all the things her hand hath wrought.

Let me love what she hath loved, in the fast receding past;

Let me take up and complete her half unfinished task;
Bringing love and worthy impulse to darkened, blemished souls.

Through the promised inspiration that her spirit life unfolds.

Ask me not, in doubt and sorrow, clinging to the vanished life,
To forget the loved one's presence in the cares of earthly strife.

Rather bid me to remember each sweet accent of her love,
That my prayers may lift me higher and be answered from above.

Salem, Ohio. —•—
T. C. P.

FINIS.

"What rendered vain their deep desire."—Matthew Arnold.

So for this life we must say good-by,
You and I who have loved so well;
Briefly, then, since the story's ended,
And there is nothing left to tell.

In years to come shall I be forgotten?
You whisper, "A woman can never forget;"
Deep in your eyes so dreamily tender
The shadow and soul of a vain regret.

For the perfect love once we deemed never-ending,
That grew to its flower, then suddenly died
In the withering heat of its own wild passion,
Leaving our hearts all unsatisfied.

Again, at the touch of a hand emollient,
My pulses are stirred to a soft delight;
In your wreathing arms what remembered rapture,
The waft of your breath is a breeze in the night.

"Ah! better while still we care," you are saying,
Need of resolve in the shaken tone;
Our lips are melting to one for an instant,
Then each from the other's life is gone.

Yet I feel, I know, that beyond this bourne,
Secure in the source from whence it came,
"The fret and the burden of sex" removed,
Our love will burn with a deathless flame.

Chicago. —•—
M. C. MCINTOSH.

REGRET.

"High upon the world's great tablet—
I will write my name.

Beauty fades, pleasure is fleeting,
Naught endures but fame;"

So she mused with eyes whose brightness
Told of youth and genius rare.

Ah, to hide from glance admiring

She was far too fair.

So, full soon, a youth came strolling,

Where absorbed she sat.

Writing lines with cadence measured—

He cared not for that—

But the hand that wrote was shapely,

... and the brow was fair;

The bright rays of summer sunshine

Matched her gleaming hair.

And he vowed that he would win her,

Win her for his bride.

Fame and glory, for heads hoary—

What is there beside?

Youth, and love, and glowing beauty

Drive such thoughts away.

Genius' claims against blind Cupid

Hold but slender sway.

Yes; he won, this youth so daring.

Life was full and sweet.

Pleasure, love, and social homage.

All were at her feet.

She forgot, in joy of living,

Youth's aspiring dreams.

Distant, vague, and void of meaning,

Now that cloud-land seems.

Age approaches, life is ending.

Nature asks surcease;

Wrapped in mists now looms the future—

Present joys decrease.

Comes again the thought—ah, sadly,

Wasted powers cry, shame—

"Beauty fades, pleasure is fleeting,

Naught endures but fame."

IDA SEXTON SEARLS.

PSYCHIC INVESTIGATION.

Few readers will need to be told that all over the civilized world, and more in Europe than in America, there is a great deal of careful research going on in the domain of what might be called super-physical phenomena. To this class of phenomena is given the name psychical or occult. They lie outside of the ordinary domain of science but some phases of them are fast being brought inside of the pale of strictly scientific knowledge. Mesmerism, which was for a long time regarded as a fancy of imaginative people or a trick of strolling charlatans, has now become hypnotism and is studied with keenest interest by every competent neurologist. Clairvoyance, long denounced by most sensible people as a fraud, is found to be a real gift residing in few persons of highly sensitive nervous organization—as real as a great musical faculty or a great mathematical faculty. There are many imperfect clairvoyants who practice their gift as a trade to get money from credulous persons who imagine they are going to get some supernatural directions about their petty affairs; but none the less is there such a thing as genuine clear-seeing, which perceives persons and things at a distance. This phenomenon can only be accounted for on the supposition that some portion of the human soul can release itself temporarily from the body and traverse instantaneously long distances to gather the desired information.

The numerous phenomena produced by so-called spiritual mediums are being carefully investigated by men of scientific training, and after all humbug and self-delusion are sifted out there is an interesting residuum of established facts that tend to show the existence of the soul independent of the body and its prolonged life in another world after the dissolution of the body. Excellent work has been done in this direction by the British Society for Psychical Research, in its two volumes entitled "Phantasms of the Living," which represents the results of ten years of research. The same society has now in preparation a second work called "Phantasms of the Dead." In the first work all authenticated accounts of the appearance of dying people at a distance from their death-beds were included for the reason that it could not be known whether the phantom appeared just before or just after the moment of the separation of soul from body. The forthcoming work will deal exclusively with apparitions of the departed. An American branch of this society has its headquarters in Boston and its secretary is Richard Hodgson. French, German and Italian scientists have made some important contributions lately to the work of investigation. All come to the conclusion that there is in the universe a mysterious force acting through persons of exceptional nervous organization and producing phenomena that are apparently supernatural, and further that this force shows intelligence and that the intelligence claims to proceed from the spirits of dead men and women. At the same time this intelligence is as a rule vague, illusive and unreliable; it baffles persistent inquiry, and except in rare instances it displays no knowledge not possessed by the living persons present at the sitting.

Research into these fascinating and mysterious phenomena has been pushed so far, however, by clear-headed men, accustomed to scientific methods of observation, that there begins to be a wide-spread hope that the independent existence of the soul and its individual life beyond the grave will soon be taken out of the realm of religious faith and popular superstition and placed upon the firm foundations of actual, demonstrable fact. The results of such a discovery upon human society would be stupendous. Most accepted creeds would crumble away, and give place to a new religion of evolution and moral

responsibility. The fear of death would no longer stand like a grim spectre at the banquet of life. Men would regard this life as a link in an endless chain of existence and would realize that they cannot escape the consequences of their actions and thoughts by loading their sins upon an atoning incarnation of deity and thus stepping from the tomb into a perpetual paradise. In place of the heaven and hell of theology we would have a certainty of a new phase of mental and spiritual life, more advanced than this because freed from the clog of matter, but neither absolutely perfect and happy nor profoundly miserable. Men would then submit to death, not in terror of annihilation or of the torments of demons chartered by an angry god, but with the serenity of "one who wraps the drapery of his couch around him and lies down to pleasant dreams."

PHOTOGRAPHING A DOUBLE.

W. T. Stead, the editor of the London edition of the *Review of Reviews* and half owner of the American edition of that remarkably successful periodical, has had some remarkable psychic experiences. His gift of automatic writing he has fully described himself in his own magazine and also in *Borderland*, the new quarterly started by him last summer. During his recent three months' stay in America he was in constant communication with his assistant editor in his London office, Stead answering questions and writing the answers with his own hand. When the mails brought him letters he would find that his automatically written answers about the important business affairs of the office were correct. A much more strange phenomenon was the appearance of his double to three families of his acquaintance in London while the real corporeal Stead was in Chicago. In one of these families preparations were made for photographing the apparition in case it should repeat its call. It came again and the camera was trained upon it. When the plate was put through the developing process nothing whatever appeared upon it except the furniture of the room where the double

stood. This plate was sent to Stead, who showed it to a clairvoyant, who immediately remarked: "What an excellent likeness this is of you, Mr. Stead." It seems that the double roams about of its own volition as a rule, but on one occasion Stead willed it to go to a distant friend and give a certain piece of information. He afterwards learned by letter that the form had appeared at the exact time he exerted his will power and gave orally the information as directed.

SALMON NESTS.—It is estimated that of the salmon that go up a stream to spawn only three per cent. get back to salt water. Nature seems to have exhausted itself in spawning, and though so weak that they can scarcely wiggle they still remain with the head up-stream, and if they survive are carried on the current to salt water. When seeking a place to spawn the female makes an oblong nest in the gravel about 12 or 14 inches long and there deposits the spawn. Both the male and the female stand guard over the spawn until hatched, fighting off salmon trout, suckers and other fish that prey upon the eggs.

THREE SOULS IN ONE.

This was the doctrine he was wont to teach,
How divers persons witness in each man,
Three souls which make up one soul: first, to wit,
A soul of each and all the bodily parts,
Seated therin, which works, and is what Does,
And has the use of earth, and ends the man
Downward; but, tending upward for advice,
Grows into, and again is grown into
By the next soul, which, seated in the brain,
Useth the first with its collected use,
And feeleth, thinketh, willeth,—is what Knows:
Which, duly tending upward in its turn,
Grows into, and again is grown into
By the last soul, that uses both the first,
Subsisting whether they assist or no,
And, constituting man's self, is what Is—
And leans upon the former, makes it play,
As that played off the first: and tending up,
Holds, is upheld by, God, and ends the man
Upward in that dread point of intercourse,
Nor needs a place, for it returns to Him.
What Does, what Knows, what Is; three souls, one man.
I give the gloss of Theotypos.

—Browning.

Solid Comfort.

Reasonable Expense.

THE POPULAR PETELEER

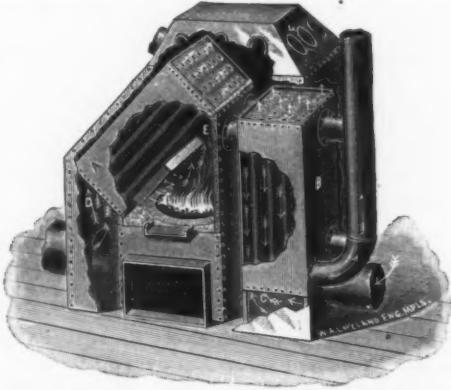
Hot Air or Hot Water.

Hundreds in successful operation in the Northwest.

PETELEER FURNACE CO.,

BOX 601, MINNEAPOLIS.

Works: 30th Avenue S. E., Interurban Line.



OUR KITCHEN GARDEN ORDER.

Corn, Cory, 1 pkts; Corn, Evergreen, 1 pkts; Peas, Little Gem, 1 pkts; Peas, Telephone, 1 pkts; Beans, Golden Wax, 1 pkts; Beans, Black Wax, 1 pkts; Beets, Eclipse, 1 pkts; Beets, Long Blood Red, 1 pkts; Radish, White Tipped Scarlet Turnip, 1 pkts; Radish, Market Gardener's Long Scarlet, 1 pkts; Cabbage, Early Jersey Wakefield, 1 pkts; Cabbage, Market Gardener's Late Flat Dutch, 1 pkts; Lettuce, Hanson Head, 1 pkts; Lettuce, Black Seeded Simpson, 1 pkts; Pepper, Bull Nose, 1 pkts; Pumpkin, Sweet Sugar, 1 pkts; Carrot, Danver's Half Long, 1 pkts; Parsnips, Sweet Sugar, 1 pkts; Onion, Red Wetherfield, 1 pkts; Onion, Yellow Globe Danver's, 1 pkts; Tomato, Acme, 1 pkts; Tomato, Yellow Plum, 1 pkts; Rutabaga, Bloomsdale Swede, 1 pkts; Turnip, White Globe, 1 pkts; Spinach, Long Standing, 1 pkts; Melon (Musk), Extra Early, 1 pkts; Melon (Water), Dark Ice Bind, 1 pkts; Squash, Hubbard, 1 pkts; Squash, Patty Pan, 1 pkts; Cucumber, Boston Pickle, 1 pkts; Cucumber, White Spine, 1 pkts; Egg Plant, Large Round Purple, 1 pkts; Parsley, Double Fine Curled, 1 pkts; Celery, White Plume, 1 pkts; Salsify, Sandwich Islands, 1 pkts; Endive, Green Curled, 1 pkts; Dill, 1 pkts; Sage, 1 pkts; Thyme, 1 pkts; Summer Savory, 1 pkts;

*These 40 pkts sent postpaid on receipt of \$1.00,
Or 20 pkts your own selection, postpaid for 50 cents.*

HOWE, HAMILTON & GRANT, Seedsmen,

20 Bridge Square, MINNEAPOLIS, MINN.

THE OPEN DOOR TO THE OREGON COUNTRY.

Two thousand miles west of St. Paul there is a country whose national glory, magnificence and loveliness is famed around the world. The stories told by returning travelers concerning its hills and mountains, its luxuriant plains, its fertile fields, its grand forests and pretty orchards, have read like myths of the imagination. So enchanting has that country seemed that men were loth to believe that it existed in reality. But the millions of people who in 1893 visited the great exposition of the world's fairness and human achievement at Chicago and laid hands upon the mighty forest monarchs of the Washington building, and eyes upon its wonderful contents, had an object lesson which convinced them that the famed land really existed and that a happy home and prosperous people lived therein.

Two thousand miles west of St. Paul, did I say? Rather is St. Paul two thousand miles to the eastward of that country yet to be the home and seat of a new people and a new power rising to a pre-eminence as much higher than all that has gone before as now stands the Anglo-Saxon race ahead of the pagan races of the middle ages.

The Western shore of America! Facing the grand Pacific Sea with the undeveloped possibilities of the chief continent of earth beyond it! American customs, American manners and American intellect have gained a firm foothold upon that continent. What the future holds in store for American enterprise there no man can predict. That it is to be great no man will deny. The Washington Country is to be the gathering place, the store-house of the commerce of the Pacific. Before the boys now entering a business life and age are old the Washington Country must be the scene of such events as it would seem chimerical now to predict. Even in the present such things have happened, such cities grown, such enterprises set on foot, such successes made, such wealth accumulated by trade and commerce, by development of natural resources, as were never made before.

Not only is it the future seat of enterprise, but it is the present home of Peace and Plenty. Nature is so kind and gentle in all her attitudes toward man that, though she rears rock-ribbed mountains miles upon miles in height, clothes them with eternal glaciers and guards their summits with the lightning and thunderbolts of heaven, yet in the valleys she is so calm, serene and entirely lovely that flowers ever bloom. So gentle are her breezes that the shallow-rooted fir tree sends its perpendicular shaft, weighing a hundred tons or more, to the height of 300 feet, where it stands, poised on a base so delicate in comparison that the daily winds of the prairie States would send it crashing to earth. These trees stand a thousand years of age, showing that for a thousand years there has been no ordinary storm like the common weekly thunder-showers of the Middle West.

It is a natural tree country, and as its forests are cleared away and fruit trees are planted in the ground they produce fruits as wonderful in size and excellence as the forest trees are large and grand. No country on earth where nature must be supplemented by artificial irrigation can produce fruits that compare with the fruits of this country more than the stunted tree-growths of such countries compare with the forest monarchs of Washington.

An acre of this land will produce so much fruit and its sale is so easy and certain that a laboring man may rely upon it for an income and a competence for his family more surely than upon the earnings of his daily toil in any other country, if insured of the continuance of health and strength and steady work; yet the cost of clearing the land is so great and the time necessary to bring fruit trees into bearing so long that a laboring man

The STEARNS FRUIT LAND CO.

Capital, \$250,000.

Office, 275 Stark Street, corner of Fourth,

PORLAND, OREGON.

cannot go there, depending upon his labor alone to accomplish the wished-for result.

But the door stands open, nevertheless, for the laborer, the clerk, the farmer or the financier to enter that country and lay the foundation of a fortune and a home for himself and his descendants for all time. There was recently organized in the city of Portland, Oregon, a strong corporation composed of its best business men and financiers for the purpose of preparing fruit land homes and taking care of them for people who want to come there to live permanently, or for a part of the year. The plan of the company is not organized on the basis of an ordinary real-estate dealing concern—it operates more on the plan of a savings bank. A person who desires to make an investment or secure a home in that country simply makes a deposit of money as a saving against the possible need for it in the home there or elsewhere. To cash depositors the company issues its guarantee contract, which is practically a certificate of deposit, and an option for the purchase of so much bearing fruit orchards within a certain area. As a certificate of deposit it earns interest at the rate of seven per cent per annum. As an option and purchase it gives the holder the right to take a home lot which will produce an annual income equal to the whole amount of the deposit. The contract allows a full term of five years, in which the holder has the option to take the money back or select the land. This plan for securing a home or making an investment has an advantage over any of the most popular building associations for the reason that it has no uncertain expense account, no fines or extra fees, and the result is positive and guaranteed by a large capital, independent of the deposits and payments of its beneficiaries.

The name of this company is The Stearns Fruit Land Company. Its head office is in the new Chamber of Commerce building, Portland, Oregon. Its president and manager is F. K. Arnold, a gentleman of undoubted integrity, probity and fortune. While of course the object of the association is a fair profit on the capital invested, its primary motive is the encouragement and assistance of the fruit culture and home making in the Northwest on lines and in a way which takes all hardship and uncertainty out of the change from the cold regions of the Eastern States to the favored land of the Pacific. It enables a man to have his home preparing there while he still pursues such occupation as he now has and out of that saves the means of greatly bettering his condition. The company has an advertisement on this page of THE NORTHWEST MAGAZINE to which those interested are referred.

D. H. STEARNS.

F. K. ARNOLD, - - President;

G. E. CAUKIN, - Vice President;

H. C. WORTMAN, - Treasurer;

E. S. BLAKESLEE, - Secretary;

D. H. STEARNS,
Manager of Agencies.

Fruit Land Homes

Prepared
and
Results Guaranteed.

The Largest Line of

Timber,
Agricultural,
Grazing and
FRUIT LANDS.

Long Time and Easy Terms.
Send for Pamphlets
and
Terms to Home Seekers.



Minnesota.

The Mississippi is to be bridged at St. Paul Park, about eight miles below St. Paul, at a cost of \$1,500,000, to give the Burlington and

Milwaukee railroads access to the stockyards at South St. Paul and to form a link in a projected belt line around the city.

C. A. PILLSBURY & Co. and T. B. Walker have closed a deal whereby they are to sell to a syndicate of Minneapolis lumbermen thirty townships of pine. The consideration is between \$10,000,000 and \$12,000,000 and it is said will furnish Minneapolis lumbermen with pine for twenty years.

JAMES J. HILL has completed arrangements in London by which he will be enabled to immediately carry out his long contemplated plan of completing the branch of his system from Fosston to Duluth. This will give the Great Northern a direct line from the lower Red River Valley to Duluth, but it will divert a heavy grain traffic from its present line by way of St. Cloud.

MUCH of the solidity of appearance of Luverne is gained from the material used in constructing or trimming the principal buildings. It is red jasper, which is quarried from a vast mountain of stone located close to the town. A very hard, reddish stone, it is capable of taking on a bright, satiny polish. A movement is now on foot to establish in Luverne a plant to work up into sandstone and monumental shafts this famed red jasper.

A PLAN is being considered by the citizens of Minneapolis, Minn., to make the Brainerd & Northern Minnesota road part of a new system to extend from Minneapolis to the Rainy Lake region. The idea is to build from Minneapolis north through the counties of Anoka, Isanti, Sherburne and Mille Lacs to Mille Lacs Lake and thence to Brainerd, where the Brainerd & Northern Minnesota will be reached. This road is constructed from that point north 40 miles, and the idea is to extend it north, passing to the east of Leech Lake, to Grand Rapids and thence north to the Rainy Lake gold fields.

ABLE to get coal more cheaply than Chicago, and possessing abundance of ore within a few hours' haul, Duluth ought in the near future to leave Chicago in the rear as a producer of pig iron and Bessemer steel. Indeed, Duluth has superior resources as a producer of pig iron and steel to Pittsburgh. The latter gets its ore from Minnesota and pays in transportation of the ore fully fifty cents a ton more than Duluth would have to pay in the transportation of Pennsylvania coal to Minnesota. Duluth can use in its furnaces thousands of tons of cheap ore at nominal prices, ore which is not considered high enough grade to ship East, and is now either thrown into the waste pile or left undeveloped.—*Minneapolis Tribune*.

MERCHANTS of the little village of Melrose, one of the most thrifty towns in Stearns County, have struck upon a metropolitan idea of carrying on business in the future, says a St. Cloud correspondent of the *Minneapolis Journal*. For some time past a number of the storekeepers each carried a large stock of general merchandise, and during the dull times competition was so strong that they finally concluded to do away with the opposition, and each of them carry only an exclusive line of goods. With that purpose in view a meeting was held and matters were so arranged that now the village is blessed with an exclusive dry goods store, hardware store, grocery, clothing, boot and shoe, drugs, notions and other establishments. In order to do this each merchant took an invoice of his stock, after which the goods were divided into their respective branches.

THE TOWN of Ortonville has voted a subsidy of \$20,000 for the extension of the Little Falls & Dakota Railroad from Morris to that place. The distance is about thirty miles across a level prairie and the grading will be inexpensive scraper work. The Little Falls & Dakota is a branch of the Northern Pacific running from Little Falls, on the main line, to Morris, in Stevens County, and is now in the hands of receivers. It is understood that the receivers have accepted the proposition of the Ortonville people and will build the extension this year. Ortonville is a smart town of about 1,200 population, at the lower end of Big Stone

Lake, and on the line between Minnesota and South Dakota. Its present railway facilities are furnished by two lines of the Chicago, Milwaukee & St. Paul. The proposed extension from Morris would give it a direct line for its wheat to the head of Lake Superior and would unquestionably be of great advantage to the place.

North Dakota.

MINOT is to have a waterworks system.

OAKES is putting up a new flouring mill.

AN EFFORT is being made to locate a German colony at Dawson.

A GOOD vein of lignite has recently been opened at Belfield, in the extreme western part of the State.

THE STATE Normal School at Valley City is having a successful year in spite of the universal hard times.

MANDAN is in a prosperous condition in spite of the low price of wheat. The railroad shops are employing more men than ever, and the sheep and cattle men in the surrounding country are good customers for the merchants.

WHEAT farming does not appear to be such a bad business after all, when one man seeds 8,000 acres in wheat this year. That is the area of land that D. H. Buttz, of Buttzville, is going to put in. He will also have 1,400 acres in flax. He thinks this will be a good wheat year and that prices will rule higher in the fall. He also finds flax a profitable crop and the straw makes excellent fodder for stock, the cattle preferring it to hay.



THE NEW FARGO OPERA HOUSE.

IMMIGRATION to North Dakota promises to be heavy this year. The past season of hard times has driven many a poor fellow in the East to seek a new location where he can better his fortunes, and to all of these the golden Northwest extends a welcoming hand. Here is the promised land, the land of Canaan for the man without money, but with a strong arm and willing heart. Here he can build for himself a comfortable home in which to end his days. In what other section of the country are the same conditions offered?—*Fargo Argus*.

Montana.

THE PURCHASERS of the property of the Henderson Mountain Mining and Milling Company at Cooke, which was sold in St. Paul in February, are arranging to start the cyanide mill and put a force of men to work.

C. W. CRAWFORD brought a lump of lignite into Glendive lately that eclipsed any lump of lignite seen in that town. It weighed 5,000 pounds—two and a half tons, and C. F. Bean, druggist, secured the monster lump for exhibition in his coal shed to scare away the balance of the winter.

THERE is a deposit of three feet in thickness of steatite or soapstone on Granite Creek, which, owing to the fine quality, ought to have some commercial value, says the *Madisonian*. It is grayish green, marks like the French chalk variety, and has the extreme softness, greasy feel and pearly lustre of talc, which are good characteristics.

BUTTE's new library of 15,000 well selected volumes and its well appointed library building, including art room and reading room, is the best possible investment the city could have made for its present and future generation. The interest young and old take in it is very pleasing and encouraging to those who furthered the enterprise. The lot on which the build-

ing stands cost \$21,000, the building about \$100,000, books \$23,000, furniture \$8,000. It will take \$10,000 to \$13,000 a year to run the library.

GEORGE W. BALLOU, of New York, and his associates recently took up a bond on a group of mines near Whitehall Station of the Northern Pacific line from Bozeman to Butte, and have completed the purchase of the property. They will proceed at once to the erection of extensive concentrating works. The purchase, which was made for \$1,000,000, is one of great importance to the State of Montana, as it is backed by one of the strongest syndicates of New York City, prominent in which are said to be persons prominently connected with the sugar trust. The group of mines purchased is considered one of the best and most extensive ever opened in Montana, and will probably become one of the largest shipping properties here. The ore carries gold, silver, copper and a considerable quantity of iron, copper being the staple. Ore has been shipped from these mines during the past two or three years profitably, but the property will now be much more extensively developed.

"THE gold production in Montana during the months of January and February and thus far in March has been double that of last year, and the prospects are that the production for the entire year will be more than double that of 1883," said W. C. Tonkin, a prominent Montana mining man, to the *St. Paul Dispatch*. "The silver mines, of course, are closed, but the copper mines are employing about the same number of men as formerly, and the gold mining has taken care of large numbers of the unemployed. In nearly every one of the mining counties large quantities of gold are being produced, and the activity in this line is much greater than it has been at any time before since the days of the old placer mining which gave the State its reputation as a gold-producer. In the Gallatin Valley and other agricultural sections they are digging big irrigation ditches and the agricultural interests of the State will be pushed from now on. They have a home market for everything they produce, and this makes farming particularly profitable just at present. The business men report a good trade, and the traveling men throughout the State report sales greatly increased during the past few months."

Idaho.

AS a result of the fruit-growers' convention held in this city, numerous associations are being organized throughout Oregon, Idaho, and Washington for the purpose of promoting the interests of farmers and fruit-growers. A convention is soon to be held at Cœur d'Alene City, when a Kootenai County horticultural society will be organized. Idaho as well as Washington possesses great possibilities in a horticultural way, and the interest in fruit culture inspired in the people of Idaho by the Spokane convention promises to be fruitful of good results.—*Spokane Chronicle*.

A LARGE cyanide plant will undoubtedly be built here this spring to work the sulphuret ores and concentrates from our mines. The experiments at the Chest, even in a rude way, have been successful beyond expectation. Mr. Tuttle, who has been doing the work, is thoroughly familiar with the process, and he has made his tests slowly and patiently. Further developments are watched with interest. It has cost the Chest \$48 to send a ton of quartz or ton of concentrates to Tacoma and have them reduced. It will cost less than \$20 a ton to reduce the sulphurets here. All of our ores are more or less charged with sulphurates, and some idea of the Chest quartz may be formed by the statement that eleven-ounce rock will yield only \$6 and \$7 in free gold on the plates. With reduction works here, the Chest ought to become the biggest gold producer in Idaho.—*Murray Sun*.

Oregon.

THE DALLES Mountaineer learns that work on the Cascade locks is being pushed vigorously, and there is every indication of an early completion. At present there are about 400 men employed. In a short time it is expected that some 200 more men will be employed.

THERE is an industry in Oregon which has reached quite a proportion that is but little thought of by the majority of people, and that is the trade in Oregon grape root. This is shown by an advertisement which appears in one of the up-valley papers that 10,000 pounds are wanted, for which \$30 per ton will be paid. The roots must be cut in pieces from two to four inches in length, free from pith and of good color. Large roots growing on the bottoms are preferred.

Washington.

MEMBERS of the Everett Land Company are large operators in developing the valuable mines in the Monte Cristo district, for which the company paid \$375,000 for a chief interest in 1891. Three different companies are organized with practically the same

stockholders, with an aggregate capitalization of \$30,000,000, to push the work in this valuable mineral district.

THE concentrator of Monte Cristo is completed and the machinery has been put into operation. The plant cost \$250,000 and the machinery in it is of the finest and most expensive.

THE Supreme Court of Washington has decided the bonds of the Middle Kittitas Irrigation Company legal, and the present session will see work resumed on this important project, which is to redeem 23,000 acres of valuable land.

THE new gold and silver smelter at Everett, with a capacity of 250 tons of ore a day, has commenced operations. The wire nail works of 1,000 kegs daily capacity and the paper mills have resumed work, all on outside orders, indicating an improved condition of business in the Pacific Northwest. The shingle mills along Puget Sound report increasing orders and most of them are running full force.

FOUR thousand crates of berries and small fruits have been pledged for delivery to a cannery to be established in Tacoma the present season at a price of three cents per pound, and no doubt the quality available will greatly exceed this amount if the plant is put in operation. One of the principal difficulties heretofore urged has been a probable scarcity of material, and the growers have taken a proper course in guaranteeing a sufficiency for a cannery established on a basis of production. There is an opening for a profitable industry here if conducted on a conservative plan and in co-operation with the growers.—*West Coast Trade.*

THE Wilbur Register estimates that in a territory of about thirty-six square miles, with Wilbur in the center, 1,680,000 bushels of grain was produced last season, twenty-six threshing machines having been engaged in taking care of the same. This crop was produced on less than one-sixth of the area of this square of thirty-six miles, the entire crop averaging over twenty bushels to the acre. What is true of this square, is true of the balance of the county. The crop last sea-

son was beyond the highest estimate given, and but for rain and the extremely low price of wheat, the country would now be enjoying an era of unexampled prosperity.

The Canadian Northwest.

A SYNDICATE of United States capitalists is asking the towns of Port Arthur and Fort William for a bonus to build a smelting and rolling mills plant, capable of turning out 40,000 tons of pig iron and 30,000 tons of steel rails per annum.

THE authorities of Wesley College, Winnipeg, have decided to commence the construction of a college building early in spring. A site has been purchased at the corner of Portage Avenue and Balmoral Street, at a cost of about \$24,000, and the building will cost about \$75,000.

THE Northern Pacific Railroad has established an all-rail service, via Seattle, Lake Shore and Eastern Railway, Huntingdon Junction and Canadian Pacific Railway, to and from Vancouver, B. C., for business originating at or destined to stations east of the Missouri River on the Northern Pacific and points East, including all stations on the Grand Trunk Railway in Canada.

THERE are no mines as yet in the Minnesota portion of the Rainy Lake mining district: the discoveries recently made there are so far undeveloped "prospects." There are working mines on the Lake of the Woods, 200 miles from Rainy Lake by the traveled route, and in the Canadian territory. Some of these are paying their owners handsomely, notably the Sultana.—*Winnipeg Free Press.*

THE several steamers on Kootenay Lake are kept busy doing business between Kaslo and Ainsworth and Nelson. Forty tons of ore are daily landed at the Kaslo wharf, which aggregate net the country from \$4,000 to \$5,000. This by no means represents the capacity of the mines. Several of the largest properties are not shipping, but storing the ore until railroad transportation is afforded the country without the expense of teaming.

A Big Government Contract.

The Pond Machine Tool Company, of Plainfield, N. J., for whom Manning, Maxwell & Moore, 111-113 Liberty Street, New York, are the sole agents, have just been awarded the contract by the Ordnance Department of the United States Army for the manufacture of gun lathes and other machine tools required in the construction of steel breech-loading rifle cannon of 12 to 16 calibre. The other bidders for this contract were the Niles Tool Works, of Hamilton, Ohio; Bement, Miles & Co., of Philadelphia, Pa.; Robert Poole & Son Co., of Baltimore, and the Builders' Iron Foundry, of Providence, R. I.

In the previous contract awarded the Pond Machine Tool Co., the time for completing the contract was four years, and they finished the contract to the satisfaction of the Ordnance Department, all the lathes having been fully tested and accepted, nearly two years ahead of the time allowed them to complete the work, and there is no doubt that the satisfaction given in the execution of their previous contracts, both in the quality of the work and the time of delivery, favored them in the decision of the award of the present contract.

The lathes are to be built from designs by the Ordnance Department, and all the detailed drawings and patterns will have to be made by the Pond Machine Tool Company; and when the lathes are completed they are to be erected at the army gun factory at Watervliet Arsenal, West Troy, N. Y. They have eighteen months' time in which to complete the contract, the amount of which is over \$200,000.

Consumption Cured.

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affectations, also a positive and radical cure for Nervous Debility and all Nervous Complaints. Having tested its wonderful curative powers in thousands of cases, and desiring to relieve human suffering, I will send free of charge to all who wish it, this recipe in German, French or English, with full directions for preparing and using. Sent by mail, by addressing, with stamp, naming this paper, W. A. NOYES, 820 Powers' Block, Rochester, N. Y.

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Soil is fine loam, rich and strong. Surface undulating, affording excellent drainage. The whole 215 acres is good; no waste. Living water in Springs; well, also. Trees have had the best of care from planting. A conservative estimate of the probable yield for 1894 is, Italian Prunes, 150 tons; Peaches, 1,000 bushels; Cherries, 1,000 pounds; Apples, 100 boxes. The prunes will cure about 40 tons. The peaches will yield much more after another year, and the 300 apple trees (all good winter varieties) not bearing now will in two years bear substantially, increasing each year thereafter. This place is in charge of an honest, industrious man, employed by the year, who will remain there if desired.

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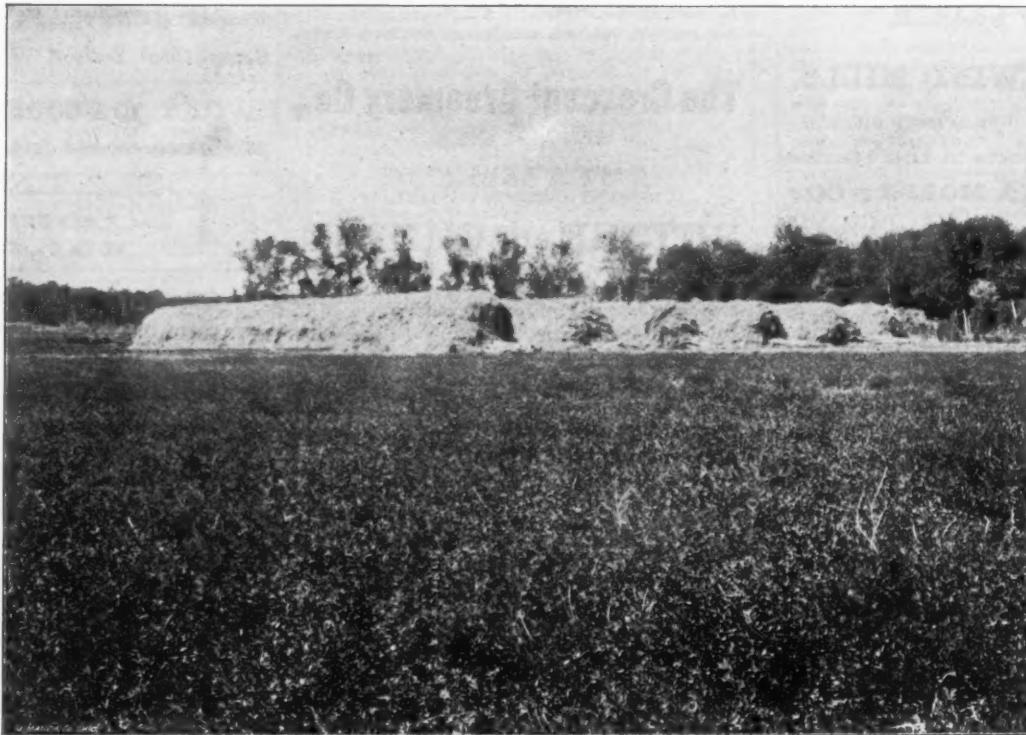
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Climate.—The summer climate of the Yakima Valley resembles that of the California valleys, in the length of the growing season, the number of sunny days, the absence of late spring frosts and early fall frosts and the immunity from destructive storms. The winters are short and not at all severe.

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NEVER HAD A CALF.

Howard T., who has lived all his short life in a city, was taken recently to visit a "real farm." The child was in ecstacies. Every animal on the place was a delight to him; but his affections especially centered about a Jersey calf.

"I would like to buy it," he said to the owner.

"But what would you give in exchange?" he was asked.

"My baby sister," replied the child with the utmost gravity; "we have a new baby nearly every year at our house and we've never had a calf."

* * *

RIGHT IN LINE.

In speaking of the peculiarities of petit juries an old settler tells of a case in Whatcom before Judge Green. A prominent business man (call him Brown) was sued for damages for a breach of contract. While out, after wrangling for several hours, one of the jurors wanted to go to sleep, and said he would go with the majority - when they agreed on a verdict to wake him up. After he had been asleep awhile one of the jurors shook him.

"Well, what have you agreed on?" said he rubbing his eye.

"We have agreed to hang him," said the juror solemnly.

"Well, it's pretty rough on the blamed fool, but I won't kick out. Hangin' goes. It'll teach him to pay his debts next time;" and he turned over and went to sleep. - *Whatcom Reveille*.

* * *



She—"All my acquaintances praise my new costume. They say it becomes me splendidly. You don't waste any words on it, though."

He—"You see, my dear, other people waste nothing but words. In my case it's money." - *Fliegende Blätter*.

* * *

AN AFFECTING TALE.

Barber—"Poor Jim has been sent to an insane asylum."

Victim (in chair)—"Who's Jim?"

"Jim is my twin brother, sir. Jim has long been brodin' over the hard times an' I suppose he finally got crazy."

"Hum! Not unlikely."

"Yes, he and me has worked side by side for years, and we are so alike we couldn't tell each other apart. We both brooded a good deal, too. No money in this business any more."

"What's the matter with it?"

"Prices too low. Unless a customer takes a shampoo or something, it doesn't pay to shave or hair-cut. Poor Jim! I caught him trying to cut a customer's throat because he refused a shampoo, and so I had to have the poor fellow locked up. Makes me very melancholy. Sometimes I feel sorry I didn't let him slash all he wanted to. It might have saved his reason. Shampoo, sir?"

"Y-e-s sir." - *New York Weekly*.

* * *

BY THE BLOOD OF A CHICKEN.

This a good story of early days from the columns of the Walla Walla *Union-Journal*: One of the ways of trying to get a Chinaman to tell the truth is to swear him by the blood of a chicken which is beheaded in

his presence in the court room. Every time a Chinaman is sworn a fresh chicken must be killed, as two of them will not swear by the blood of the same bird. In the good old times, when Bill Horton was chief justice of Walla Walla, chickens were so scarce as to readily sell for six bits each. One day a Chinese case was tried before Justice Horton and several witnesses swore to tell the truth, as they saw the truth, over the streaming blood of chickens killed in the court room. As each witness was sworn the record of his oath was thrown behind the desk of "the judge," who, having a good mouth for chicken, intended to have a wake-up feed the next day. But the well-laid plans of his honor were knocked out by some graceless scamp who stole the evidence of the Chinese oaths while court was in session.

* * *

RAISED THE PRICE OF TAPE.

"The very best story I ever heard," said John Thomas to the corridor man at the Laclede, "is vouches for by Captain Rivers of the Fort Worth & Denver Railroad. A Russian Hebrew came to this country and established a dry goods and notion business. He was so successful that he sent for his younger brother and started to educate him in the business. The boy was slower to learn the ways of the world than his brother had been and the latter sometimes grew impatient. One day he said:

"Now, schust vait und see how I do. Dere vas a lady."

"The lady asked to see some silk, which was shown, a piece at \$2 a yard.

"But I saw some like it a few days ago for \$1.50," she said.

"I dind doubt it, madam; but dat vas some days ago. I vas selling dese goods at dot price until yesterday, ven we got vod dot all the silkworms in China vas dead, und dot goods will cost us more as \$2 now."

"The lady was satisfied and bought the silk.

"Now, you see how that vas done. Dere vas a lady, now; you vait on her," he said to his brother.

"The lady entered and asked for tape. The young man was all attention and the desired article was speedily produced.

"How much?" the lady asked.

"Ten cents a yard."

"Why, I saw some for eight cents."

"I dind doubt it, madam; but dot vas some days ago. Shust today ve heard dot all de tape worms vas dead, und dere would be no more tapes less'n twenty cents a yard." - *Globe-Democrat*.

* * *

A SHARP SVENSKA.

The Crookston, Minn., *Times* says the following happened in a municipal court in that city the other day: As the young man took the witness chair, after having been duly sworn to tell "the truth, the whole truth and nothing but the truth," the usual questions were propounded:

"What is your name?"

"Hans or Peter."

"Hans or Peter? How can that be?"

"Well, you see, I vas born a twin."

"But don't you know whether your name is Hans or Peter?"

"No, sir."

"Have you any parents?"

"Yes, sir; one father and one mother."

"Don't they know whether your name is Hans or Peter?"

"No, sir."

"Well you explain to the court why it is that you do not know whether your name is Hans or Peter?"

"You see, I vas a twin. My brother an' me vas born at the same time. One of us got froze ven ve vas little, an' my mother she know not vich von it vas."

"How old are you?"

"Three years ago now, I tank I vas twenty-one years old. I am twenty-two now."

"How do you reckon that?"

"The two years I vas in Sweden I don't count."

"Are you a married man?"

"Yes, sir."

"Whom did you marry?"

"A woman, of course."

"You don't suppose the court understands that you could marry a man!"

"I don't know. My sister she married a man last fall."

"What is your trade?"

"I've got t'ree trade."

"What are they?"

"In the morning I milk the cows; at noon I go down town, lorf' round, and at night I get full."

Asked by the court—"Why do you evade the questions asked you in this manner? What do you suppose I am sitting here for?"

"Oh, I don't know, quite—about two or three dollars a day, I s'pose."

"Chief, lock this man up till he comes to his senses," thundered the justice.

"Much oblige, yudge; I tank I work you plenty. Dis har a party cold winter."

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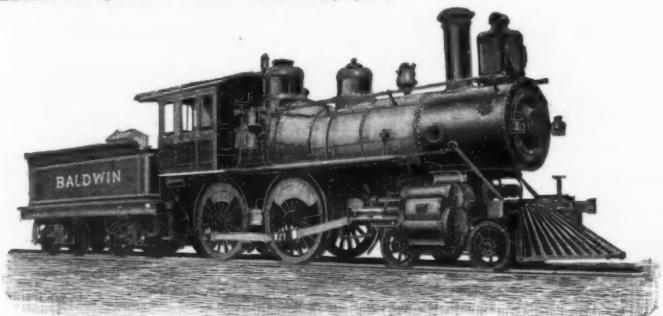
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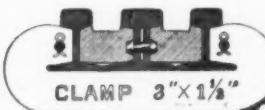
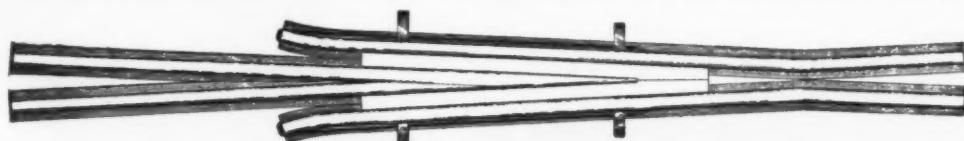
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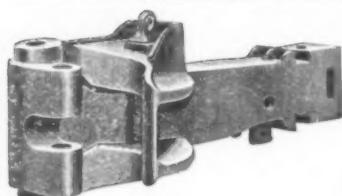
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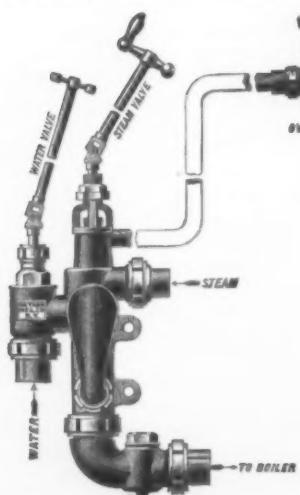
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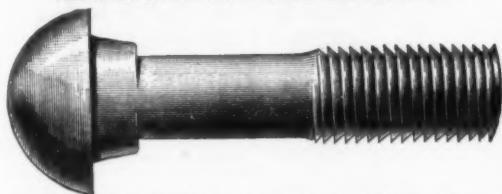
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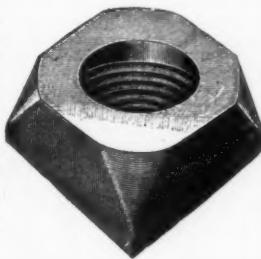
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Seaweed Powdered with Gold.

The keeper of the Fort Canby lighthouse on the Washington shore at the mouth of the Columbia displayed some seaweed at Astoria that was thickly powdered with fine gold. The weed, after being bleached and mixed with boiling water, makes a bland mangle indistinguishable from the real corn starch. Mr. Anderson picked a quantity of it last spring and bleached it throughout the summer in shallow wooden boxes. The other day, when cutting the boxes up for kindling wood, he noticed that they contained a large number of scattered grains of gold, and on some of the pieces of seaweed he also found traces of the precious metal. Tracing the cause of this strange discovery to its sources, it appears that in the spring when the swell around the lighthouse is not very strong, the black sand that abounds in that locality had been washed over the kelp continuously, leaving those gold deposits behind on the seaweed.

Speculation Does not Create Wealth.

Riding between Portland and Salem, one can see through the car windows fields of idle land; fields that once yielded the wealth transmuted by the chemistry of commerce into brick buildings, the paved streets and the electric lights of the valley towns. The wealth we see about us on every hand has come in its ultimate origin from the soil or the waters of Oregon. It has been drawn from the streams or dug out of the ground in some form or other. Some of it was fished out; some chopped and sawed; some planted and plowed out; some sliced and panned; some sowed and harvested. Borrowing money and speculating in town lots had no part in the making of Oregon. In much favor these latter years, their possibilities of usefulness seem, for the present at least, to have been about exhausted. We have been borrowing money of each other and trading jackknives with each other about as long as those occupations can be made to yield any revenue.—*Portland Oregonian*.

Breeding Reindeer.

A Madison, Wis., man has been selected to go on a very peculiar and interesting mission—William Kjellman, a young Norwegian of thirty-four years. He has a wife and a three-year-old daughter, and all of them will soon be located at the uttermost western point of the American continent, surrounded only by native Eskimos and a few Laplanders. Kjellman has been deputized by the United States Government to go to Lapland, get five or six Laplander families and their dogs, then proceed with them to Port Clarence, jutting out in the narrowest point of Bering Strait, there to remain presumably for the remainder of their days. The object in transplanting Laplanders to Alaska is to obtain the benefit of their knowledge in breeding, developing and using reindeer. The whole scheme is a Government venture possessing the greatest likelihood of having in it elements of practical utility. At Port Clarence a little coast fishing is done, but in the interior no industry has yet been established of any value whatever. To all intents and purposes the land back from salt water lies idle and non-productive, and yet it abounds in the choicest of food for reindeer—moss and other lichens.



Who says it is unhealthy to sleep in feathers? Look at the spring chicken, and see how tough he is!

Teacher—"How many mills make a cent?"
Johnny—"None of 'em. Pa says they're all losin' money."

One-half the world does not know how the other half lives; but the women are trying their best to remedy that.

The man that is born to be hanged will never be drowned; but it is best not to venture too far beyond your depth, young man, for all that.

George—"You would marry the biggest fool in the world, if he asked you, wouldn't you?"
Ethel—"O George, this is so sudden!"



Fat Suitor—"Here, Johnnie, is a nickel. Now tell me what your sister said about me after I called the last time."

Johnnie—"Better give me another nickel not to tell you what she said about you."

Teacher (in mineralogy class)—"Johnny, give me the name of the largest known diamond."
Johnny—"The ace."

KNEW HIM.—Tramp: "Madame, I was not always thus." Madame: "No. It was your other arm you had in a sling this morning."

If Patti wants to keep thoroughly in touch with the American pocketbook this year she should "sing a song of sixpence."—*Chicago Dispatch*.

Tramcar Passenger—"I have paid my fare."
Conductor—"I don't recollect it."
Passenger—"And you won't re-collect it, either."

Judge—"Have you anything to offer the court before sentence is passed?"
Prisoner—"No, your honor. My lawyer took my last shilling."

At a recent concert, at the conclusion of the song, "There is a good time coming," a farmer arose in the audience and said: "Mister, you couldn't fix the date, could you?"

Little drops of water
Poured into the milk
Make the milkman's daughter
Dress herself in silk.

Auntie—"A penny for your thoughts."
Little Nephew—"I was thinkin' that if I kep' real quiet, and pretended to be thinking, you'd wonder what I was thinking about, and say jus' what you did. Gimme the penny."—*Street & Smith's Good News*.

A church paper says that a printing office in Kentucky is opened every morning with prayer. That is quite a departure from the usual custom. Establishments of that kind are usually opened by the "devil" and not unfrequently closed by the sheriff.

Winks—"I notice that your barber always talks to you in the French. I did not know that you understood that language."

Jinks—"Well, I don't; but you needn't tell him so."

Tommy—"Pa, may I ask you a question?"
Pa—"Certainly, my child."

Tommy—"Well, where is the wind when it doesn't blow?"

"Isn't your neighbor rather quiet in his tastes?"

"Well, to be honest, I don't know when he takes them, but, Jupiter! he nearly raises the roof after he has swallowed them!"

St. Peter to Shade of Actor at the Gate—"Come in and get your harp."

Shade of Actor—"Well, do I have to play in the orchestra?"—*Truth*.

Customer—"I want a number two that will fit comfortably and—"

Shoe Clerk—"Yes, ma'am; we have that very size in fives."—*Chicago Inter Ocean*.

Jarvey (to Cockney tourist)—"This is the Devil's Glen, sorr."

Tourist—"Indeed! It strikes me the devil owns a lot of property in Ireland."

Jarvey—"Yis, sorr; but he's an absentee who laves the landlords manage his estates."

Tourist (now in sympathy with "Home Rule")—"And of what use, do you know, are the lords of the land?"

Jarvey—"O-then, sorr, the devil only knows."—*Spare Moments*.

Uncle George—"I trust, Henry, that you are out of debt."

Henry—"No, I haven't got quite so far as that; but I'm out of about everything else."

Bertha—"I knew you were a literary man, Mr. Scribbler, the first time I saw you."

Mr. Scribbler—"Did my countenance shine?"

Bertha—"No-o, but your coat did."

A clergyman startled his drowsy congregation the other day as follows: "My dearly beloved friends, permit me to remind you that I came here to preach, not to act as umpire in a snoring match."

Lady—"For shame, that the young man should smoke in the car! Won't you speak to him, sir?"

Solemn Gent—"It would be useless, ma'am."

"And, why, pray?"

"I'm his father."



Photographer—"Now, madam, please assume an agreeable expression of countenance."

Son-in-Law in background—"I must see how she looks with such an expression."

These tight and economic times

The paradox lesson teach;

The closer money seems to get

The more we find it out of reach.

No matter what they sing or say,

The world rolls in the same old way,

And he that would possess his soul

Must hold on tight and let her roll.

Mamma—"Bessie, how many sisters has your new playmate?"

Bessie—"He has one, mamma. He tried to fool me by saying that he had two half-sisters, but I guess he didn't know that I studied arithmetic."

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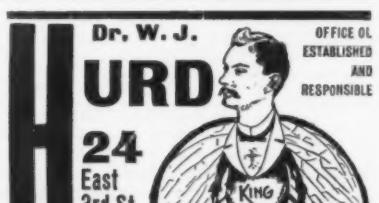
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* There is no more land in the United States than when Columbus discovered it, except a little made ground at the mouths of the rivers.

* Our population is increasing very fast and the hunger for land will become greater every year.

* Land is increasing in value every day. In time it will be as high priced as it is in England.

* Land is the basis of all wealth.

* It cannot be stolen.

* It cannot run away.

* It cannot burn up.

* It produces the food of man and animals.

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* The Northwest invites everybody. There is a good deal of everything to be found there.

* The new transcontinental line of the Great Northern gives transportation facilities to large areas of new farming, grazing, lumbering and mining country.

* For publications and information about rates, routes, localities, etc., in the Northwest, address F. J. Whitney, G. P. & T. A., St. Paul, Minn.

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In Montana,	" 17,450,000 Acres
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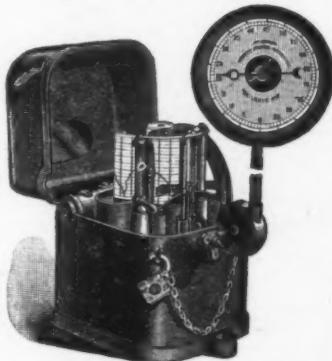
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